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ABSTRACT

This volume contains the text of six speeches selected from approximately 125 plenary talks that have been given over the past few years at more than 40 Freshman Year Experience Conferences by leading educators concerned about improving the first year undergraduate experience. In the first speech, "The Undergraduate Experience: Critical Issues for the 1990s," Ernest L. Boyer reflects on curriculum, teaching, sense of community, and assessment. In the second selection, "On Impostorship, Cultural Suicide, and Lost Innocence: How Freshman Adults Experience Critical Thinking" Stephen D. Brookfield focuses attention on the first year experience of non-traditional-aged adults entering college. Next, Sheila Tobias, in "Professors as First-Year College Students: What Can They Teach Us?", looks at students' academic self-image and how that may shape their choice of majors. For the fourth paper, "Along the Way" William C. Hartel, a professor of history at Marietta College, traces his evolution as a thinker, scholar, teacher, and activist on behalf of first year students. Stuart L. Smith in "Is Student Success Really a Serious Concern at Today's Universities?" reviews challenges to Canadian higher education. The final paper, "In Search of Hope and Heroes" by Laura I. Rendon, discusses responding to the challenges of increasingly diverse student bodies. Author biographies are included. Some papers offer references. (JB)

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Perspectives on the Freshman Year Volume II

Views on the Critical First Year from

Ernest L. Boyer
Stephen D. Brookfield
Sheila Tobias
William C. Hartel
Stuart L. Smith
Laura I. Rendón

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National Resource Center for The Freshman Year Experience University of South Carolina 1992



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Introduction John N. Gardner

It is with pleasure that I provide an introduction for this monograph from the National Resource Center for The Freshman Year Experience at the University of South Carolina. Three years ago, the center published the first volume entitled, "Perspectives on The Freshman Year," which shared with our readership the unique perspectives of six important thinkers on the first year education: Art Levine, Lee Upcraft, Alexander Astin, Reginald Wilson, Lee Knefelkamp, and Peter Scott. It is with equal pleasure that I am now able to introduce a second volume in which we offer you the thoughts of Ernest Boyer, Stephen Brookfield, Sheila Tobias, William Hartel, Stuart Smith, and Laura Rendón.

Just a little more than a decade ago, I was trying to continue my own professional development as a faculty member who had been administering a freshman seminar for the previous decade. There was little in the way of a literature base to which I could turn to enhance my thinking about how to improve the teaching and learning of first year students. This monograph series is one response to remedy that condition.

Increasingly as the 1980s came to a close and the 1990s were upon us, it has become more and more difficult for higher educators to travel to conferences to hear the thinking of scholars and practitioners alike in this important American education reform movement. Thus, we have been working very hard in our National Resource Center to produce more and more of these ideas in print form. This monograph will play an important role in that regard.

The writers, thinkers and scholars in this monograph have all made important contributions to improving the first year experience. Each of these individuals is an outstanding spokesperson for higher education and each offers a unique perspective. The staff in our National Resource Center for The Freshman Year Experience selected these six speeches from the approximately 125 plenary talks that have been

given at more than 40 Freshman Year Experience Conferences.

As I wrote in the introduction to Volume I, conference organizers make a value statement in the selection of featured speakers. The speakers whose addresses are included in this monograph have been at the forefront of change in higher education, and their espoused values reinforce the ideals of the freshman year experience movement. The selection of keynote/ plenary speakers for our conference series has also been a very personal decision for me in my capacity as the conferences' host and director. I have been intimately and directly involved in the selection of each of these speakers and have the privilege of continuing a long standing professional and/or personal relationship with a number of these individuals. Thus, I am honored to count these six as my colleagues within the international movement to enhance the freshman/first-year experience.

Ernest Boyer needs no introduction. He honored us for the first time in 1987 by being our first keynote speaker at our first conference in the United States outside South Carolina, the home of The Freshman Year Experience. That was when he spoke to a gathering at the University of California at Irvine. We brought him back to The Freshman Year Experience in February 1992 when he spoke at Columbia as you shall read herein. There is perhaps none currently living in American higher education who has had a greater impact on the current thinking of faculty and administrators as to how we must reorder our priorities to give greater attention and recognition to the dignity and importance of teaching first year students.

At the 1991 National Conference on Higher Education organized by the American Association for Higher Education, on whose Board I have had the privilege of serving, I met a wonderful scholar named Stephen D. Brookfield, formerly of Columbia University and now at the University of St. Thomas in St. Paul, Minnesota. His insights on teaching adult students, I thought, would be of interest to many you who



serve that enormously important constituency. More fundamentally, Stephen had inspiring insights to offer on the craft of teaching all types of first year students. Thus, we wanted to feature him as well. You will read what he had to say to our 1992 Freshman Year Experience Conference on Teaching which was held in Kansas City.

At that same meeting, we were also privileged to hear one of my colleagues from the board of the American Association for Higher Education, Sheila Tobias. Sheila's thinking on methods to improve science education in the United States has been truly profound. Her interest, her concern and her counsel have influenced me in my own recently developed conviction that the improvement of the freshman year experience in science and technological education must be a priority for our work at the National Resource Center now and for the future.

My own work in the freshman year experience has been profoundly influenced by my experiences as a new students at Marietta College in 1961. After a very stormy first year, I survived and flourished especially due to the presence of outstanding and caring faculty at Marietta College. I graduated in 1965 just before William C. Hartel was appointed as a faculty member in history in September 1965. In the late 1970s and throughout the 1980s, Professor Hartel was in the leadership of a vanguard of faculty committed to improving the freshman year experience at Marietta College. As an active alumni I became familiar with his work at Marietta and felt he epitomized the view we needed to provide to others at one of our Conferences focusing on the Small College. Thus, you will read the reflections of Bill Hartel, the epitome of a liberal arts professor at a small college, tracing his own evolution as a thinker, scholar, teacher, and activist on behalf of first year students.

Stuart Smith will not exactly be a household name to many American readers, but he is having a profound effect on our colleagues to the north who share many of our concerns for first year students in Canada. Dr. Smith has recently chaired and written the report of the Commission of Inquiry on Canadian University Education. He has undertaken a profound examination of the current status of undergraduate education in Canada. His thoughts are controversial, and are enjoying much debate and study in Canada which will continue long after you read his thoughts. We were privileged to have him deliver the keynote to our third Canadian/American International Conference on The First Year Experience which we hosted in Victoria, British Columbia in May 1992. Between 1953 and 1958, I lived in Canada and received five years of excellent grade school education. The inclusion of Dr. Smith's thinking in this perspectives is a reflection of my continuing interest in Canadian higher education. I never would have dreamed then that I would be able to return to Canada several times to visit Canadian campuses and to co-host and coorganize conferences to help educators examine the status of the first year experience for students. We include this speech especially because of my enduring gratitude for the quality of Canadian education and my concern that Canadian higher educators learn from both the successes and mistakes of their colleagues to the south. In turn, I think American readers can profit from the thinking of this visionary Canadian spokesperson for the new directions in Canadian higher education.

Finally, we conclude this monograph with a marvelous address given by one of the most promising leaders, writers, and thinkers on the future of higher education for Hispanics in this country: Professor Laura Rendón. Dr. Rendón is a faculty member in Arizona State University's College of Education. Prior to her appointment at Arizona State University, she held positions in the College of Education at the University of South Carolina and North Carolina State University. Currently, Dr. Rendón and I serve on the board of the American Association for Higher Education and in that venue, as in every other in which I have seen her work, she inspires and redirects the thinking of others to what should be appropriate priorities for improving the learning of first year students.



Dr. Rendón first spoke at The Freshman Year Experience Conference at our west coast meeting in January of 1989 where she said:

Our educational institutions, particularly higher education, like to perceive them selves as pillars of perfection. When something goes wrong with the system, it is easier to blame the victim for contaminating the system. In so doing, institutions practice scapegoating. They focus on the needs and deficiencies of students instead of facing up to the institution's own imperfections.

My colleagues at American Association for Higher Education, and especially Ted Marchase, as the editor of *Change Magazine* and the American Association for Higher Education Bulletin, printed Dr. Rendón's complete speech from the January 1989 west coast meeting, and now we bring you her remarks from our Regional Conference held in Austin in 1990. You will be moved by her remarks as was I.

This monograph would not be possible without the competent, careful, and gentle editing of our staff at the National Resource Center for The Freshman Year Experience: Betsy O. Barefoot, Co-Director; Dorothy S. Fidler, Senior Managing Editor; and Norris F. Manning and Eric S. Graff, Editorial Assistants. I am deeply indebted to them for their work on this second volume of what we plan to be a continuing series of publications of keynote plenary addresses from The Freshman Year Experience Conferences. I hope that you will find these speeches in the cold light of print as warm, moving, inspirational, and thought provoking as did those who heard them delivered at our conferences. As always, I thank you for your interest in and support of our work on behalf of improving the freshman/ first-year experience.



"The Undergraduate Experience: Critical Issues for the 1990s"

By Errest L. Boyer

Ernest L. Boy

Keynote Address Annual National Conference The Freshman Year Experience Columbia, South Carolina February 21-25, 1992 This Freshman Year Experience Conference is a decade-long celebration of what has become an international movement on behalf of students. I have watched with enormous satisfaction as this movement has become international in scope and absolutely central in impact. It has, in my judgment, helped to redefine the priorities of higher learning, and this is only the beginning.

Before we examine the undergraduate experience, I would like to take a few minutes to look back over the history of my involvement in the academy. I can reflect on four distinct decades. In the 1950s, we were deliciously optimistic, but in retrospect, it seems that we were also too smug and not sufficiently introspective. I was at the University of California during that decade, and we were building a new campus each week, it seemed. We were convinced that the bubble would never burst, but I'm afraid that the sense of growth outdistanced our inquiry as to the quality of the college experience, especially as it related to undergraduate education.

The optimism of the 1950s gave way to the confrontations of the 1960s. We all remember the sixties as the time of the civil rights movement which reached the campus quickly and the tragic and terrible Vietnam war. But what also might be remembered is that before we engaged in the civil rights movement or the confrontation in Vietnam, we were engaged in confronting our higher education system. There was a deep feeling among many undergraduates that the universities had become more preoccupied with their efficiency and their computer cards than with the well-being of their students. In 1964, the Berkeley students protested, saying, "I am not a number." In the 1960s, then, there was an investigation as to the nature of the system.

I should say that unlike some of my colleagues, such as Allan Bloom, I do not remember the 1960s as an unmitigated disaster. Some critics suggest that during the sixties the universities were unwilling to keep the ship afloat. But they fail to understand that if we had no universities that permitted themselves to be forums in which hard concerns were debated, there would have

been more bloodshed in the city streets. The universities played their role every single day without a script, unable to predict what would happen next. They struggled to hold the place together, believing that communication was better than confrontation, hoping that somehow through human discourse we would find human understanding. So those who criticize the university in the sixties underestimate the role that higher education played during the agony of that period. The university helped save the nation by providing forums in which our confrontations could be authentically examined.

There were, of course, moments I have tried to put deep into the recesses of my cerebrum. After all, that was the decade when my hair turned from black to white. But I also like to recall the times I spent with students, who were often more willing to be honest and authentic than were the faculty or the politicians. They had little to lose, and so they spoke from the head as well as the heart. I remember the teachins not as a time when students and faculty were so angry we could not listen to each other, but as a time when we were willing to come out of our boxes and speak from our own conviction. We listened to each other not as deans and psychologists and freshmen and registrars, but as human beings.

Today, however, the university bureaucracy is organized so that the messages go up and down the line. We have very few horizontal channels of communication that allow us to consult with one another, not about process, but about purpose. So I say two cheers for the 1960s, when we engaged in an urgent inquiry as to our meaning and our purposes, both within the academy and across the nation. It was a decade that one can recall with poignancy as well as sobering reflection.

Then came the 1970s. What did happen in the seventies? We had a recession early in the decade, but more than that, there was a sense within the academy that somehow the bloom was off the rose. We had survived, but we were not back in full health.



In the 1980s, higher education began to regain its strength and its sense of confidence. But we had strong external critics. Secretary of Education William Bennett and others took hard shots at higher education, and the press and the public began to listen. The academy was not prepared for these unrelenting attacks, having just come out of a period when we were highly self-confident. In the sixties, we believed in ourselves. In the eighties, we became defensive.

That leads me, then, to the 1990s. This decade is the threshold for the new millennium. We are moving toward a new century that will present sobering challenges to the human race as we try to survive on the planet Earth. The entire world is having to rethink where it is going. This opens up an absolutely remarkable opportunity for higher learning to redefine its purposes and goals and to renew its priorities. Whether we are going to be successful or not in that venture is still an open question. But I believe, above all, that the decade of the 1990s will be the decade of the undergraduate experience. I foresee an inquiry into this age-old undergraduate tradition and an attempt to rediscover our obligation to our students. This critical issue has been brought to our consciousness. Those who are concerned with the freshman year experience at colleges around the country are the vanguard of a movement toward strengthening undergraduate education, a movement that will persist with great energy in the decade before us.

As I listen to the discourse, I hear the discussion about higher education focusing on four old but very central themes. I would like to concentrate on these issue, which take us to the heart of what higher learning is all about.

The Curriculum

First, we are turning to the old question: What should we be teaching? We have had curriculum reform movements for as long as colleges have existed. But I think we are now entering a discourse about the core of common learning with a level of interest and integrity that could help revitalize the undergraduate experience

and give new meaning to the freshman year. I think that previous reform movements, previous attempts to rearrange the academic landscape, have primarily been struggles about which department gets which credit. The process has had less to do with redefining the nature of knowledge than with redefining the politics of the academy. But today I think we are finally moving toward more authentic questions that deal with the quality of intellectual life and the priorities of the academic culture.

To some extent that is what the multiculturalism debate is all about. I understand that line, are being drawn between the so-called "old disciplines" and "new constituencies," women's studies and black studies, for example. Some unkind things are being said, as critics worry that we are going intellectually soft by creating new fields of scholarship to respond to the interests and concerns of various groups. There is much tension between the old disciplines and the new constituencies.

In my opinion, though, the debate about multiculturalism is not simply about the politics within the academy. It raises questions that are vital to our nation. Who are we as a people? What is the nature of our relationships with each other? How do ve view each other? How is power distributed? So, in my judgment, multiculturalism is not simply another academic debate.

What does multiculturalism have to do with the undergraduate experience? Everything, in my view, because how we organize the core curriculum tells students how we view the world. If all they learn is viewed through the prism of a single department, then they are engaged in nothing more than intellectual escape. If we do not encourage freshmen and undergraduates to discuss their learning thematically, illuminating who they are and where they fit, and if they do not become inclusive instead of exclusionary, we will have educated them in a way that has nothing to do with the world they are going to encounter in the year 2000 and beyond.



Let me take a moment to tell you about a core curriculum typology that intrigues me. It is based on what I call "human commonalities." It is my view that we could organize our undergraduate course of study not on the basis of the disciplines, but on the basis of universal human experiences. This would help our students understand that amidst all of our differences, we have commonalities that bring us all together. Rather than educating students only to be different, we can help them to understand the bonds that make us human. I am terribly frightened by some of the language of diversity and difference that exists today. We celebrate our individualism, but we do not have a firm sense of community. If we do not find language in our curriculum and in our culture to affirm our connections, I fear that we will be dividing ourselves into confrontational enclaves.

In reflecting on this idea of human commonalities, it occurred to me that we are all held together by eight experiences that are universal, and these experiences could be a framework for the core curriculum, or a series of themes around which the freshman year experience might be organized.

The first experience that we share is the life cycle of birth and growth and death. Students can go through life and never inquire into the miracle of their own lives, never understand the importance of nutrition and sustaining their own health. They know more about the carburetors of their cars than they do about the interior of their own bodies. We are not even reflective on the certainty of death. We deny it. We institutionalize it. We pretend it is not there. We turn it over to undertakers and walk away. I would like to propose, then, that the core curriculum, at least in the freshman year, have students reflect on the universal experience of life.

Second, we all communicate. First we have life, and then we have language. It is imprinted in the genes. I read in the Washington Post recently that eight-month-old babies recognize phonemes and start to use the building blocks of

language before they ever understand the words. Language is gene driven, God given. It is a remarkable act, and yet we treat it so casually.

I stand up here and vibrate my vocal cords and molecules go bombarding in your direction. Signals go scurrying up your eighth cranial nerve, and there is a response deep in your cerebrum that approximates the images in mine. We are connected through the use of symbols.

Third, we are also connected through the aesthetic; we all respond to the beauty of the arts, music, and dance. If you want to get along in another culture, take a guitar. I mean to say that if you sit in a park anywhere around the world and start playing music, you will find people who will listen, because everybody knows that language. They might not know the song, but they can respond to the aesthetic experience nonetheless. That is part of being human.

I was in Urbana, Illinois a couple of months ago, talking about the language of the arts. I was told that during the sixties, on one of the riot days on campus, the students were organizing out on the quad. About six or eight faculty and staff came out and put up a platform and started setting up to play jazz music. The students were gathered around, ready for one more day of fighting, and they asked, "What are you doing?" The faculty said, "We're getting ready for a jazz concert." The students said, "You don't understand. We're protesting." And the faculty said, "Go ahead and protest. We're going to protest, too." They started this jazz concert, and something changed. The point is that connections can happen through the arts, understandings that words cannot convey. So while we attempt to strengthen the freshman experience, let's understand the universal experience of the arts.

Fourth, we're all born into groups and institutions, and they shape our lives. Students should understand that while the institutions vary from one culture to another, we all have institutions that shape us: the family, the church, and even the college residence hall.



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My son lives in a Mayan village, and I have three Mayan grandchildren. I go to Belize to see them every year, and it is like traveling over a thousand miles and back a thousand years. They are still washing in the river. At first, it looks like we have nothing in common; but I see that they have families. They elect village leaders. They have jails. They have schools. They have religious worship. They have shared experiences and social structure. So despite the differences, there is a commonality of group experience. And I think that we need to know not only about our own culture, but about the cultures of others, too.

We also need to understand the connections across generations. Alex Haley said that one of the great losses in American culture is the front porch. Sitting on the front porch, his grandma told him about his roots and he reminisced about the connections between young and old.

A sad characteristic of our culture is the fact that each generation is living in a disconnected world. We build institutions such as retirement villages and day care centers which separate the generations. It is as unhealthy to be in a day care center where the average age is three as it is to be in a retirement village where the average age is 80 or on a campus where the average age is 20. We have lost our intergenerational ties. As a result, children are growing up alone, without any sense of who they are or where they fit.

Margaret Mead said that the health of any culture depends on the living presence and interaction of at least three generations. But we have created a horizontal culture where the ages live alone and where many young people do not know much about their past or their future.

We do not even spend much time with our own parents. We surveyed 5,000 fifth- and eighth-graders at the Carnegie Foundation a few years ago, and 60 percent of them said they wished they could spend more time with their mothers and fathers. Thirty percent said they never sit down together to eat a meal with their family.

Somehow, we must help young people discover that we all have roots, and that we can both recall the past and anticipate the future. We must also help them see that they are connected to the natural world. If we do not learn more about ecology, and about our relationship to the natural world, we are not going to survive on this planet.

When I was Commissioner of Education, Joan Cooney, the creator of Sesame Street, came to see me one day. She said she wanted to start a television program on science and technology for junior high school kids to teach them about their relationship with the natural world. They had surveyed some kids in New York City and asked them, "Where does water come from?" and the students said, "The faucet." "Where does light come from?" "The switch." "Where does garbage go?" "Down the chute." This is a frightening situation. We are all connected to nature, and we must help our students to understand this.

We are all engaged in producing and consuming, as well, yet we have created a society in which children know what they consume but seem confused about what it takes to produce. The toy stores are stacked from floor to ceiling with "stuff," and the kids somehow have a notion that all of this appears from nowhere. I think that the young people coming to our colleges today have no real sense of the interrelationship between producing and consuming. They grow up in a culture where they do not see the nature of work.

Finally, I think that every human being is engaged in a search for meaning. We are all frightened by the prospect that there is nothing larger than ourselves. We need some sense of purpose and value to guide our lives, and this may come in many forms. It may be organized religion. It may be some political ideology. All of us want to frame ourselves in a context of larger meaning.

One way to give meaning to life is to serve others. As Vachel Lindsay wrote on one



occasion: "It's the world's one crime its babes grow dull; not that they die but they die like sheep." The tragedy of life is not death. The tragedy is to die with commitments undefined, with convictions undeclared, and with service unfulfilled. In the book, College: The Undergraduate Experience, we propose that all students engage in community service so that they see some connection between what they learn and how they live.

My point is this. I believe that we are beginning, in the undergraduate experience, to reexamine the questions of what we should be teaching and what students should learn. The issue is not simply learning another academic subject, and it is not turning the credentials in to the registrar for the degree. The issue is trying to discover something about who you are and where you fit. One approach is to use the commonalities to explore the nature of our existence. Perhaps students during the freshman year could engage in a search for human commonalities, discovering that regardless of their sex, race, country of origin, or other characteristics, we do have bonds that affirm who we are and where we fit. To me, connections are an appropriate theme for the freshman year experience and perhaps an appropriate typology for the undergraduate core curriculum as a whole.

Teaching

Beyond the question of what we should be teaching, there is the question of how to strike a balance between teaching and research. I never imagined that I would see in my lifetime the kind of vital inquiry that is occurring today on campuses from coast to coast into the importance and the centrality of teaching.

The Carnegie Foundation recently published a report entitled *Scholarship Reconsidered* in which we tried to get away from the old "teaching versus research" debate and ask the larger question, what does it mean to be a scholar? We suggested that there is a scholarship of discovery, a scholarship of teaching.

The truth is that in the recent past, and especially since World War II, our universities have celebrated research as a unitary model and diminished the centrality of teaching, and now we are seeing a whirlwind of hostility for the imbalance that we have built. We have recruited students with enthusiasm. We have promised them that we care, but when they come to campus, they find that the student and faculty cultures are two separate worlds. Students are not given the value and the attention that they deserve.

When we recruit students, we are collegiate. It is part of our tradition. The viewbooks are filled with the words community, collegial, and family. Universities that have 30,000 students still say, "We're a family." The problem is, it is only the recruitment spiel. We present the collegiate images, but when students come to campus, they discover that the faculty culture is geared to a totally different world, where, in fact, faculty are penalized if they spend too much time with students. To accommodate that, we have assembled a group of student personnel colleagues who keep fanning the embers of collegiality, especially during the freshman and sophomore years, while the faculty are marching to a different drummer. The student and faculty would never meet. We concluded in our report that somehow these two cultures need to be brought back together.

The good news is that on college and university campuses today, I see the emergence of a vital and honest debate about how to give credibility to teaching. There is more attention to teaching now than in the last thirty years. In a seminar we had just today at the University of South Carolina, some 100 faculty attended.

I do not want to get sentimental, but I do want to make a simple point: great teachers live forever. They shape the minds and thoughts of children from the early grades through college and graduate school. Teaching is a sacred act, and those who teach well, it seems to me, should be heroically remembered.



The academy must rediscover teaching not only to give students what they pay for, but in a more fundamental way, to keep scholarship alive. The teachers that I remember knew their subjects; they knew their students; and they had some chemistry about who they were-they were authentic human beings. They not only taught the subject, but to use an old cliche, they taught themselves. When that mentoring connection exists, you really know it. The influence of teaching goes on and on like ripples in a pond. I'm saying that how we redefine teaching, and how we deal with the very difficult issues of promotion and tenure, and how we develop credible and generalizable standards to evaluate teaching are all fundamental. The fact that these issues are being discussed now is enormously encouraging.

The Sense of Community

The third question we are beginning to ask is, how can we strengthen community on campus? A year and a half ago at the Foundation, we produced a book entitled *Campus Life: In Search of Community*. That book addressed the question, how can we sustain diversity while affirming community, not only on the campus, but in this culture? Can we have commonalities in the midst of our obvious differences?

This question not only concerns the future of the colleges, but the very future of the United States. I am deeply troubled by what I see as a growing tribalism, and I think there are many young people in this country who feel that college is not open to them, who do not even aspire to go to college. In the sixties, we had young people and minority groups and others who said, "I want in." But I am worried today that there is a growing mood that says, "I don't want in."

America is, I believe, at a threshold of deciding whether we can affirm community not in a sentimental way, but in the deepest sense while we celebrate the mosaic of our differences. Every college and university is at that threshold, as well. In *Campus Life*, we developed a half

dozen principles of community, and I would like to leave them with you. We said that to have community, the institution has to be caring, and it has to be celebrative.

Building community on our sprawling campuses is enormously difficult. But after we did our study on campus life, I concluded that what matters is not the length of time that students spend on campus; it is the quality of the encounter. We assume that the colonial college had a strong sense of community, but this is not necessarily true. You can be small and residential and still be divided. What matters is the sense of common purpose, the sense of justice, the quality of relationships.

I am saying that to be successful, a college has to be held together by more than common grievances over parking and such. It has to have some degree of shared purpose and a deep sense of caring. Universities and colleges are struggling nobly to emphasize our diversity, but we find our commonalities, as well?

Assessment

My last question is this: how do we evaluate the outcomes? We have talked about the curriculum, about teaching, and about building community. But how can we judge the results? That question is debated more vigorously today than in the past decade or two. Some of the impetus is coming from the outside. There are political pressures to hold universities accountable in a very rigid, mechanistic way, and I do not feel sanguine about that. I worry first of all about the motives and second about the methods. I fear that we could be driven to develop meaningless recall examinations near the end of the baccalaureate degree, having students put check marks on a paper as even chimpanzees can be trained to do. Is that what being an educated person is all about?

Ours is a test happy culture. Like children pulling up the plant every two weeks to see if there are any roots, we are using narrow examinations that don't measure the full potential of



the individual. I think we have to be very careful not to destroy the potential of our students through mechanistic approaches to testing and evaluation. When we did the book *College*, our research found that in most of the classes they visited, there was little evidence of what Mortimer Alder calls the "Socratic method."

As a result, I am not enthusiastic about most of the conventional measures we use to evaluate outcomes. Is there a better way? The only measures that have validity, in my opinion, involve oral and written discourse. I think it would be appropriate to ask all students to write an essay on a consequential topic to demonstrate what they have learned in college. In so doing, we could examine their ability to integrate and apply their knowledge, their capacity to address important issues, as well as their ability to communicate what they know. Is this not what the whole effort is about? How can we find out what students have learned if we do not hear what they say and read what they write?

If we are under pressure to evaluate outcomes, if we are pressed by politicians as well as by our own conscience to find out whether higher education is paying off, we should ask students to demonstrate what they know and how well they can think. That might, in fact, give us the leverage we need to avoid some of its strategies proposed by the critics outside the university.

I have another thought on the issue of evaluation. Up until the middle of the last century, you didn't simply accumulate green stamps called credits and turn them in to the registrar for a degree. You had to stand up and present and defend your ideas and be critiqued by others, in what we called a declamation. Perhaps we could have senior seminars in which students present written papers orally to their colleagues and are critiqued, establishing a new version of the old-fashioned declamation. Students could even be asked to present papers that integrate knowledge from various academic disciplines. Perhaps every campus could have a senior symposium where a half dozen graduates

would present their papers to the entire campus in an open forum, demonstrating to younger students what it means to be an educated person. As a final twist, perhaps these students could be selected randomly.

We have gone though four breathtaking decades, each with its own flavor and design. Today, our colleges and universities are under siege, and there seems to be a growing assumption that higher education is more for private benefit than for the public good. These trends are deeply disturbing.

It is deeply encouraging to see that we are focusing once again on undergraduates and returning to some fundamental questions: Is there a core of common learning? How can we give new dignity and status to teaching? Is it possible to affirm community in the midst of all of our diversity? And finally, can we evaluate our students in ways that demonstrate the integrity of the mind and not simply the ability to recall isolated bits of trivia?



"On Impostorship, Cultural Suicide, and Lost Innocence: How Freshman Adults Experience Critical Thinking"

By Stephen D. Brookfield

Keynote Address
Special Focus Conference: Teaching
The Freshman Year Experience
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Brookfi Stephen

Encouraging students to undertake critical thinking is one of the most frequently espoused aims of undergraduate programs across the disciplines. A considerable body of educational literature has been produced in this area, some of it focusing on conceptual analysis (Siegel, 1988; McPeck, 1990) some of it on debate reflecting the strains between progressive, humanistic and liberal interpretations of these processes and radical, critical socialist interpretations (Giroux, 1988; Young, 1990). What is noticeably absent from a great deal of this literature, however, is detailed attention to the visceral and emotional dimensions of critical thinking—to the ways it is experienced by students in critical process as a contradictory reality, at once troubling and enticing. This paper attempts what might be called a phenomenology of critical thinking as it pertains to one particular group of learners—freshmen students who also happen to be adults. The adult freshman student on campus is an increasingly familiar figure, yet literature on the Freshman Year Experience is still firmly focused on traditional aged students. This paper tries to break the age barrier by focusing attention on this neglected population.

Although writers frequently allude to the importance of understanding critical reflection as an emotive as well as cognitive process (Brookfield, 1987; Mezirow, 1991) there are few grounded phenomenographic depictions of how students, particularly those who are freshmen feel their way through the process that so many educators have prescribed for them. The personal voice and subjective experience of the learner is often curiously absent. This sparsity of renditions of students' own situated struggles as critical learners might be one explanation for the creation of an unfortunate dichotomy, on the one hand, the sophisticated critical pedagogue able to penetrate hegemony, dominant cultural values and structural distortions with a single withering glance of pure clarity and, on the other hand, the learner as unquestioning dolt, duped into an uncritical acceptance of distorted meaning perspectives which have made structural oppression, economic inequity, racism, sexism, and the silencing of divergent voices

seem wholly natural. This is an overly simplistic caricature, but it is one which Ellsworth's (1989) ethnographic study of critical pedagogy seems to confirm. It is important to stress, too, that college teachers' reflections on their own struggles as critical learners are invaluable in helping them to work sympathetically but usefully with others in critical process. In dealing with the freshman year, we tend not to draw upon our own autobiographies as learners. Yet recalling this experience can provide a powerful window on our practice as educators.

For the purposes of this discussion critical thinking is defined as comprising two interrelated processes: (1) the experience of questioning and then replacing or reframing an assumption, or assumption cluster, which is unquestioningly accepted as representing dominant common sense by a majority, and (2) the experience of taking a perspective on social and political structures, or on personal and collective actions, which is strongly alternative to that held by a majority. There are, of course, three problems which are immediately apparent with defining critical reflection in this way. First, focusing so strongly on counting as 'critical' those assumptions and perspectives that challenge the mainstream could allow the development of far right assumptions (about, for example, the self evident truth of notions of racial supremacy) to count as legitimate examples of critical thinking. After all, David Duke and Jean Le Pen have built their political constituencies by claiming to represent a challenge to conventionally espoused wisdom. Second, defined in the way described above, what count as episodes of critical reflection could focus exclusively on personal growth and miss entirely the political edge central to my own understanding of this process. And, thirdly, this definition of critical reflection risks separating reflection from action, of treating this process as a disconnected form of mental speculation with no requirement that the person concerned change herself, or her world, in any

As freshman adult students speak about their



experiences entering college and being confronted with critical thinking processes, five provocative themes emerge - impostorship, lost innocence, cultural suicide, roadrunning, and community. Taken together these themes depict the experiential terrain traversed by those engaged in sustained critical thinking for the first time in their lives as learners. Let me say something about each of these in turn.

Impostorship

Impostorship is the sense adult freshmen report that at some deeply embedded level they possess neither the talent nor the right to become critically reflective. As adult freshmen describe the beginnings of their journeys as critical learners, they speak of their engagement in critical thinking almost as a form of inauthenticity, as if they are acting in bad faith by taking on the external behaviors they associate with critical analysis without really feeling a sense of inner congruence or conviction about these. In the freshmen whose stories inform this narrative, a sense of impostorship regarding the rightness of their taking critical perspectives on familiar ideas, actions and social forms does decrease over time, but it rarely disappears entirely. Not all share this feeling, it is true, but amongst the group represented here it did seem to cross lines of gender, class and ethnicity. White, upper middle class males - the most politically incorrect of all beings - were perhaps less reluctant to speak openly about this at the outset, but by the time they came to trust their colleagues and to feel that they would not lose face in dropping the mask of command, they too admitted to fleeting feelings of impostorship.

At the outset of a critical thinking episode, the triggers that bring this sense of impostorship to the forefront of consciousness are seen at distinct times in adult students' autobiographies. The first of these has to do with the moment of public definition as a new college student. The news that an adult has been admitted into an undergraduate program is greeted with a sense of disbelief, not entirely pleasurable. A typical comment is the following:

"When I got the news that I was admitted into the program, I couldn't believe it! I had this weird feeling that it had all been a mistake - some awful bureaucratic error had been made somewhere and another applicant with the same last name but different initials had really been given the place and they'd got the files mixed up in the admissions office. And it was almost as if I didn't deserve to be with this group of obviously superior people."

The second set of stories concerning impostorship also concerns a moment of public definition or recognition as a learner, this time in a social setting. The experience beloved of so many college teachers of having participants introduce themselves at an opening program orientation session as a way of relieving students' anxieties, had the converse effect of heightening these same anxieties. Rather than affirming and honoring their prior experiences, this round table recitation of past activities, current responsibilities and future dreams served only to heighten the sense of impostorship. A typical comment is:

"That first morning when we were put into a circle and asked to introduce ourselves, I almost died! We went round the circle taking turns and as I heard other new students talk about where they'd come from, where they'd worked, what they brought to the group - I sank deeper and deeper into my chair. By the time it got round to me, I was terrified that my own work would seem so small and irrelevant compared to what everyone else had done. I was sure that as soon as I opened my mouth I'd say or do something stupid that would make it obvious that I didn't really deserve to be there."

The theme of impostorship that surfaced among freshman adult students had a particular connection for me since the theme is one woven into my own biography as a college teacher. For

example, whenever I agree to speak to a group of peers at a professional gathering I am conscious of my own sense of impostorship. Indeed, this sense of being mistakenly elevated to a public role of knowing and speaking something special makes me contradict, deliberately, a common tenet of responsive educational practice. Espoused theory in our field holds that good college teachers find out as much as possible beforehand about the people they are working with, so that they can develop curricula, activities and evaluative forms that are indigenous rather than externally imposed. My sense of impostorship surrounding public speaking means that I do the exact opposite, shutting myself off from knowing anything about the variety and intensity of experiences embedded in the lives of my audience members. The more I know about their work, the more I feel humbled by their abilities. In this case, having prior knowledge of my audience freezes me into inaction rather than helping me make informed decisions about what to do or say. If I know too much about who they are and what they have done as educators I start to say to myself "what on earth can I say to these people that has any chance of being taken seriously, or considered important, by them?" Reading and listening to freshman adult students' tales of impostorship was one of those times when my being as a researcher and my private consciousness as a college teacher came together in a vivid way.

Impostorship of a more complex and embedded nature manifests itself in a third way in the reverence adult students feel for what they define as 'expert' knowledge enshrined in academic publications, or at least in the public domain of the published, printed word. The people whose voices are represented here are mostly students on courses at a major private university, yet they regard themselves primarily as practical people rooted in the world rather than as theorists or academic thinkers. When asked to undertake a critical analysis of ideas or bodies of knowledge in their disciplines these students will often say that to do so smacks of temerity and impertinence. More particularly,

they will report that their own experiences are so limited that they give them no starting point from which to build an academic critique of major figures in their fields. There is a kind of steamrollering effect in which the status of 'theorist' or 'major figure' flattens these students' fledgling critical antennae. This is perhaps most evident when the figures concerned are heroic in their eyes but it is also evident when students are faced with a piece of work in which the bibliographic scholarship is seen as impressive. Where such works are concerned students will say, "How can I, with my limited experience, begin to contradict or criticize all the studies and research documented in here?" The sense of impostorship they feel makes their experience of engaging in critical thinking seem a rather unconvincing form of role-taking, even play acting. Their assumption is that sooner or later any critique they produce will be revealed to be the product of an unqualified at d unfit mind.

Cultu al Suicide

One common tale from adult students new to the college experience concerns the psychological, interpersonal and cultural costs this entails. Surfing on a wave of unbridled enthusiasm for their return to higher education, and unaware of the possibility that others might not share this zeal, they report how their wave collapses in on them as spouses, friends, children and colleagues seem at best bemused, and at worst angry, at their efforts. This phenomenon can be described as cultural suicide and it is what often happens to people who are seen by those around them to be reinventing themselves, to be in critical process. Cultural suicide is the threat learners perceive that if they take a critical questioning of conventional assumptions, justifications, structures and actions too far they will risk being excluded from the cultures that have defined and sustained them up to that point in their lives. The perception of this danger, and experience of its actuality, was a common theme in the stories I heard. Adult students who took seriously professors' injunctions to think critically reported that this often



caused those around them to view them with fear and loathing, with a hostility borne of incomprehension. The adult who was formerly seen by family, friends, and colleagues as 'one of us', was now - in his or her role as a college student - seen in one of two ways, both of which carried a real sense of threat. On the one hand, the adult concerned may be viewed as taking on airs and pretensions, as growing "too big for her boots," as aspiring to the status of intellectual in contrast to her intimates, friends and colleagues who felt that they were now somehow perceived as less developed creatures grubbing around in the gritty gutters of daily life. On the other hand, adults newly returned to college are sometimes seen as turning into subversive troublemakers whose raison d'etre now seems to be to make life as difficult and uncomfortable as possible for former friends and confidantes. A common experience reported by the adults whose stories are told here was of their rapidly being marginalized as a result of their slipping into a more critical mode in their daily lives. They found out that their raising of critical questions regarding commonly held assumptions was not met with unalloyed gratitude by their colleagues, friends or family, but rather with resentment and suspicion, with a feeling that the person concerned had betrayed their culture and had somehow become a pink tinged revolutionary. Many adult students complained that being critically reflective had only served to make them disliked by their colleagues, had harmed their careers, had lost them fledgling friends and professionally useful acquaintances, had threatened their marriages, and had turned them into cultural pariahs. The following are typical comments:

"One thing I wish I knew back then was how many friends this was going to lose me - 'How to lose friends and influence people against you,' that would be a good manual for critical thinking. If there is one thing I'd say to people who are starting off on this process it would be 'get used to loneliness and make sure you know in advance who your real friends are.' There are a lot of people

who will say 'great' when you mention the need to challenge assumptions, but bring it close to home and they'll turn on you. I made the real mistake of thinking that when people said they welcomed constructive criticism they really meant it, but I'll tell you the rhetoric and reality just don't match up, people's egos are a lot more fragile than I realized. Bruised Egos and Broken Careers - that would be a great title for a book on critical thinking."

"My church has a lot of pretty conservative people in it and I always knew that but I was kind of surprised by the way they reacted when I started talking about the social obligations to faith, things like that. It was almost as if - who are you, Castro? I just wasn't ready for that, so I had to be a bit more careful, I wasn't looked at as one of them any more."

Lost Innocence

Adult freshmen in critical process speak of the epistemological as well as cultural risks they run and they see their learning critical reflection as a journey into ambiguity and uncertainty requiring a willingness to let go of eternal verities and of the reassuring prospect of eventual truth. In contrast to the relentlessly upbeat rhetoric surrounding much exposition on empowerment, liberation, emancipation and transformation, their description of their journeys as learners are quite often infused with a tone of sadness. In particular, they speak of entry to college as entailing a loss of innocence, innocence being seen in this case as a belief in the promise that if they study hard and look long enough they will stumble on universal certainty as the reward for all their efforts. A typical comment is as follows:

"When I came to this university as a freshman I thought I was going to find the truth. I didn't really express it that way to anyone - or to myself - but I think that something like that was in the back



of my mind. There was the feeling that if truth didn't reside in the heads of you guys - or on the library shelves - then it couldn't be found anywhere. Then I got here and the first I heard from you all were things like 'it's more important to ask the right questions than find the right answers.' Real enigmatic stuff and actually pretty annoying when you're trying to study for certification exams and trying to get out of here as fast as possible. But after a bit I got what you all meant and I started to be a bit more skeptical about things I read and aware of cliches, things like that. Now while this was happening one part of me was saying this is really good, you're getting more sophisticated, you're looking beyond the surface. But another part of me was annoyed about what was happening. I used to get up in the morning thinking that life was black and white, good and bad, that there were always answers to problems. Now I say to myself 'it all depends on how you look at things' or 'don't trust anyone with a nameplate on the door' and I know that's a sign that I've changed for the better. But I have to tell you that there are days when I wake up in the morning and I feel like if I hear another 'it's important to pose problems before solving them' I'll scream. I just want you to tell me the answer, to get me outta here! And while I'm thinking that I know that I'm not being like the way you want me to be you want me to be critical and everything - but I can't help it. There was something that was kind of reassuring in my feeling that even if I didn't have the answer someone did."

Although this kind of comment represents a loss of epistemological innocence, an absence of a previously felt faith in the impending revelation of certainty, it also signifies what could be viewed as a corresponding growth in wisdom, in wise action (Sternberg, 1990). People look back on the freshman year of dualistic thinking,

and to their early faith that if they just put enough effort into problem solving, solutions would always appear, as a golden era of certainty. As they progress through college an intellectual appreciation of the importance of contextuality and ambiguity comes to exist alongside an emotional craving for revealed truth. As practically the only book addressing directly the connection between emotions and adult learning recognizes, the transformative dimensions of critical thinking involve, for an adult, "the agonizing grief of colluding in the death of someone who he knows was himself" (More, 1974, p. 69). In terms of schemes drawn from developmental psychology, people experiencing a loss of innocence are caught in the relativistic freeze between concrete and dialectical thinking (Basseches, 1984, 1986) or between dualism and multiplism (Perry, 1981). Despite the prevalence of a sense of epistemological loss, however, one can look long, hard and mostly unsuccessfully for themes of yearning, bereavement and sadness in reports of adult learning found in professional journals and research conference proceedings. Perhaps because acknowledging learners' sense of loss counteracts the relentlessly upbeat, positive tone which advocates for higher education believe will serve to attract learners, this theme is consistently ignored. Deans and directors who are quick to emphasize the liberatory, emancipatory aspects of self-actualization and perspective transformation are understandably reluctant (in a time of budget cuts and increased competition for the institutional 'cash cow' add! students represent) to advertise the fact that these learning processes have their dark side.

Roadrunning

Mezirow's (1981, 1991) writings on adult perspective transformation have stressed how incremental movement through various stages is the most typical rhythm of critical thinking. The freshman adult students whose experiences of critical thinking are reported here support this insight. In speaking of critical thinking as a learning process, they describe a rhythm that might be called incremental fluctuation; put



colloquially, this rhythm can be understood as two steps forward, one step back, followed by four steps forward, one step back, followed by one step forward, three steps back, and so on in a series of fluctuations marked by overall movement forward. It is a rhythm of learning which is distinguished by evidence of an increased ability to take alternative perspectives on familiar situations, a developing readiness to challenge assumptions, and a growing affective tolerance for ambiguity, but it is also one which is characterized by fluctuating moments of falling back, of apparent regression. When learners are in the middle of these temporary regressions, they report that they experience them as devastatingly final, rather than inconvenient interludes.

They are convinced that they will never 'get' critical reflection, that "it's beyond me," and that they may as well return to tried and trusted ideas and actions on the grounds that even if these didn't account for everything in life at least they were comfortable, known and familiar.

In the roadrunner cartoons we see the same scene repeated endlessly. The roadrunner is hurtling along the highway, his 'beep beep' cry raising the coyote's frustration to ever higher levels. The roadrunner comes to the edge of a canyon and, because he's possessed of supernatural powers, leaves solid ground to go out into mid air. Suspended 2,000 feet above the canyon floor, he turns round and makes a face at the coyote, who is himself coming to the edge of the canyon rim. The coyote's adrenaline is already pumping through his veins with the thrill of the chase and he becomes incensed even further by the roadrunner's evident temerity. The coyote's speed picks up and he hurtles off the edge of the canyon into thin air in pursuit of the roadrunner. After about three seconds, however, the coyote realizes he's in mid air. He freezes, looks down at the canyon floor, 2,000 feet below, looks back at the camera with a quizzical, deflated expressing, and then plunges to the canyon floor, the screen a mess of limbs and bloodless body parts. In the next frame, of

course, we see that coyote has been magically reassembled off camera and the chase begins anew.

The moment when coyote realizes that he's in mid air - the moment of existential crisis when perception and physics cohere and the law of gravity comes into effect - has the same quality as a particular moment in the incremental rhythm of learning critical thinking. This is the moment when freshmen in critical process realize that part of the freshman year experience fastens them in a state of limbo. Entranced by the prospect of transformation - of shaking off the shackles of previously distorting, uncritically assimilated assumptions about themselves and their place in the world - new students embrace the process of critical thinking with an enthusiasm and optimism borne of the prospect of imminent change for the better. As they struggle to discard or reformulate assumptions that now seem not to explain the world adequately, there is a sense of forward movement, of progress toward true clarity of perception. The critical struggle with its attendant aspects of impostorship, cultural suicide and lost innocence, is seen as worthwhile because of the transformative fruits it will bear. There comes a moment, terrifying in its impact, however, when these students feel they have left behind many of the assumptions, meaningful schemes and perspectives which used to explain their world but that no other coherent ones have moved into the vacuum. At this moment which comes fairly soon into the freshman year there is a feeling of being in limbo, of being suspended above the canyon floor with the solid ground of familiar assumptions left behind and nothing new that has congealed in their place. This is the time when students crash to the floor of their emotional canyons, when they face the crises of confidence that cause them to abandon their quest for critical insight and to claw their way back to the security of the known. However, as happens with the coyote, whatever initially prompted their quest - whatever tantalizing impulse borne of trauma or a niggling sense that 'things don't fit' spurred them on the search for more authentic assumptions in the



first place - invariably comes back into play. Sooner or later, the journey for critical clarity begins again, but this time there is a greater preparedness for the moment of suspension, and an ability to stay dangling above the canyon floor for a few seconds longer than was formerly the case.

Community

Impostorship, lost innocence, cultural suicide, moments of crisis in roadrunning - these make for a pretty depressing rendition of the experience of being a freshman, and one which stands in marked contrast to the positive optimism of much college rhetoric. There is, however, a more hopeful experiential theme which emerges from these tales from the dark side - the theme of community. As freshman students speak of their early involvements in critical thinking they attest to the importance of their belonging to an emotionally sustaining peer learning community - a group of students who were also experiencing dissonance, reinterpreting their practice, challenging old assumptions and falling foul of conservative forces. As they talked and wrote about the factors that helped them sustain momentum through the lowest moments in their autobiographies as critical learners, it was membership of a learning community - of an emotionally sustaining group of peers - that was mentioned more consistently for freshman adults than anything else. These groups were spoken of as "a second family," "the only people who really understand what I'm going through," "my partners in crime," and they provided a safe haven in which students in critical process could confirm they were not alone, and through which they could make sense of the changes they were experiencing.

"Really, the people in our group - I don't know how I would have survived without them. I'll tell you if I hadn't had this group I don't think I could have made it. They pulled me through some bad times, boosted my confidence when I thought I was done for - and I tried to help some of them out in return,

you know pay something back maybe.
Really, that group was like an epic - you know, 'all human life is there.' And it wasn't just doom and gloom, there were some great times - celebrations and long conversations as well as crying on each other's shoulders."

Conclusion

In terms of the adult student autobiographies featured in this study, the attempt to accommodate the discrepancy between the actuality of the college experience and the idealized images of fulfillment being a freshman student was supposed to provide, had a number of typical consequences. These students began speaking about the Emperor (the world of ideas and intellectual inquiry) having no clothes, they became contemptuous of the cloistered, ivorytowered nature of higher education, and they reported the temptation to develop a deep and pervasive cynicism about the possibility of finding personal meaning in their studies. At moments of incremental fluctuation in the rhythm of learning critical reflection there is a real danger of falling prey to radical pessimism of feeling that one is powerless in the face of immovable organizational, social and political structures and that one is alone in recognizing this fact. To counter this danger it is important that freshman students have the opportunity to talk to each other about their dilemmas, pains, epistemological tangles and practical confusions in a supportive community.

Since learning critical reflection entails so many tales from the dark side, it is important that college teachers and those working in counseling or academic advisement have the chance to gain accurate insight into the emotional and cognitive ebbs and flows of this process so that freshman students' periods of confusion and apparent regression can be interpreted more clearly. Knowing what freshman students are experiencing, a strong case can be made for encouraging new students to share their private feelings of impostorship, cultural suicide, lost innocence and roadrunning in an attempt to



help them realize a community. By using learning communities as a forum in which they can compare their own private journeys as critical learners, freshman students realize that what they thought were idiosyncratic incremental fluctuations in energy and commitment, moral sapping defeats suffered in isolation, and context-specific barriers preventing change, are often paralleled in the lives of fellow learners. This knowledge, even if it fails to grant any insights into how these feelings can be ameliorated or how these barriers might be removed, can be the difference between resolving to work over the long haul of an undergraduate degree, and falling prey to a mixture of stoicism and cynicism in which staying within comfortably defined boundaries of thought and action becomes the overwhelming concern.

Alerting learners to impending feelings of impostorship and lost innocence, to the risks of cultural suicide, to rhythms of roadrunning, and to the importance of community as a counter to the alienation these may induce, has an important benefit for those of us who are college teachers; namely, it eases the ethical pangs we feel when we are accused by learners of not telling them the whole story about critical thinking. Many of us have felt the angst ridden indignation of students wash over us as they complain that they have been duped into critical thinking with rhetorical but as yet unfulfilled promises of emancipatory release from distorted, constraining perspectives. As learners ride the storm waves of personal, professional and political dislocation critical thinking involves - when all they are aware of is the havoc it is creating in their lives - their feelings of insecurity and their sense of uncertain leavetaking can easily turn into expressions of anger and betrayal at the instigator of this process, that is, at the educator. Educators who are drowning in this tidal wave of fearful anger need to know (if they are going to have a minimal sense of having behaved ethically and therefore have the fortitude to continue to their work) that they have engaged in full disclosure with learners about what might happen to them as they begin critical thinking. Full disclosure - the attempt by

teachers to make as clear as possible to students the qualities, risks and likely consequences of the experience they are about to undergo - is a condition of authenticity in any education encounter, but is particularly important in the freshman year. It is also the case that anticipating the kinds of rhythms, reactions and feelings freshmen are likely to experience as they are in critical process reduces college teachers' temptation to blame themselves when 'negative' aspects of learning appear. Too many of us in higher education feel such a need to engage in humanistic affirmation of learners that any expression by people that they are at all puzzled, saddened, frightened or angered by what is happening to them is perceived by us as evidence of our own lack of sensitivity.

We may well feel an understandable, but unfortunate, desire to wash the process of entering college clean of any stain of negativity. When, inevitably, stains appears we suffer pangs of remorse at our inability to dignify and honor learners in a safe, respectful atmosphere. An appreciation of the phenomenography of learning critical thinking in the freshman year is one of the few hedges college teachers have against a moral sapping sense of professional failure when they see freshman students experiencing the dark side of critical struggle.

References

Basseches, M. (1984). Dialectical thinking and adult development. Norwood, NJ: Ablex Publishing Corporation

Basseches, M. (1986). Dialectical thinking and young adult cognitive development. In R. A. Mines & K. S. Kitchener (Eds.). Adult cognitive development: Methods and models (pp. 76-91). New York: Praeger.

Brookfield, S. D. (1987). Developing Critical Thinkers. San Francisco: Jossey-Bass.

Ellsworth, C. (1989). Why doesn't this feel empowering? Working through the repressive myths of critical pedagogy. *Harvard Educational Review*, 59, 297-324.



- Giroux, H. S. (1988). Teachers as intellectuals: Toward a critical pedagogy of learning. Granby, MA: Bergin and Garvey.
- McPeck, J. E. (1990). *Teaching critical thinking*. New York: Routledge.
- Mezirow, J. (1981). A critical theory of adult learning and education. *Adult Education*, 32, 3-24.
- Mezirow, J. (1991). Transformative Dimensions of Adult Learning. San Francisco: Jossey-Bass.
- More, W. S. (1974). *Emotions and adult learning*. Lexington, MA: Lexington Books.
- Perry, W. G. (1981). Growth in the making of meaning. In A. W. Chickering (Ed.). *The modern American college* (pp. 76-116). San Francisco: Jossey-Bass.
- Siegel, H. (1988). Educating reason: Rationality, critical thinking and education. New York: Routledge.
- Sternberg, R. J. (Ed.). (1990). Wisdom: Its nature, origins, and development. New York: Cambridge University Press.
- Young, R. (1990). A critical theory of education: Habermas and our children's future. New York: Teachers College Press.



"Professors as First-Year College Students: What Can They Teach Us?"

By Sheila Tobias

Sheila Tobias

Plenary Address
Special Focus Conference: Teaching
The Freshman Year Experience
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W hile serving as Associate Provost at Wesleyan University I began to track the majors of female students. Wesleyan had gone co-ed in 1970, and had attracted some of the very ablest women students. In studying their transcripts, I discovered a phenomenon I named the "slippery slide off the quantitative." I compared the declared majors of pre-freshmen with actual majors at graduation and found that the women more than the men would switch majors during their sophomore or junior year in order to avoid math requirements. For example, they would find their way into sociology in order to avoid the intermediate statistics required for psychology; or the freshman women would change from the sciences to the liberal arts in order to avoid algebra.

A Question

As their Provost, I first approached the math faculty and asked them to explain why so many female freshmen changed their majors to avoid math. The wording of the question was very important; so I phrased it as follows. Why, in their view, would otherwise intelligent and able students, who could do very good work in the social sciences, humanities, or the arts be disabled in mathematics? Why would they not succeed, or worse yet, think that they could not succeed at quantitative subjects? The math faculty, a very committed and enlightened faculty, gave me three answers:

- Freshmen who change their majors to avoid math are dumb in math. They didn't say it quite as boldly, but that's what it amounted to.
- Such students are unmotivated and lazy, as if the liberal arts are not nearly as rigorous as math.
- Even more sadly, they let me know that they did not think this was an interesting question.

I thought it was. Indeed long before talk began about the punitive shortfall of math and science

graduates, I set about researching the question myself. I published the results in *Overcoming Math Anxiety* which has been in print for 15 years and will be reissued next year in a new edition. As far as mathematics is concerned, I located the problem in the K-12 period when Otherwise Smart Kids develop specific traumas or very bad feelings that they cannot succeed in math. Thus, they bring "math anxiety" with them to college.

Science turns out to be another subject that Otherwise Smart Kids tend to avoid. In order to find out why, I had to look for something other than anxiety because we do not teach much science in K-12. When we do, we teach it as fun, not as a rigorous, scary, right-answeroriented subject. So the variables I had isolated in math anxiety would not necessarily hold for science. In other words, freshmen would arrive at our portals in college, not necessarily deeply anxious about science, but rather with an ignorance about science, and that because they had not taken much, they probably would not do very well. So I shifted my experimental model to try to answer the question: What makes science hard for Otherwise Smart Kids?

Expert Learners in Science

In the first iteration I asked this question of scientists who were faculty of chemistry and physics which are the gate-keeping courses and the gate-keeping fields, and I found that the scientists were not particularly interested in this question because they thought they had an answer.

"What makes science hard?" I asked. "Science is hard," they told me, "because it's hard! It's hard because it requires the kind of work, commitment, and talent that other fields don't require." A dean announced at a meeting of faculty, I was told at one university which I was visiting, that computer science had come to be known as the hardest course in that college, at which point, a physicist leaned over to another physicist and audibly whispered, "We'll have to do something about that."



Thus, not only is there this generalized belief that the sciences are hard in ways no other subjects are hard, but scientists, particularly physical scientists, take pleasure in that fact. Their's are the scary subjects. Their's are the lowest grades and only the best students are likely to succeed.

If scientists were not able to answer or were not interested in answering my question, I was going to have to go elsewhere for the answer; and I did. I developed the Peer Perspectives model. First, I would ask a host university to recruit a class of willing volunteers, nonscience faculty whose intelligence, ability to focus, willingness to work hard and sophistication are so indisputable that no one could dismiss them as dumb or lazy. Then I would place them in artificially constructed science classes, at the freshman level, taught by a willing scientist.

To give you a flavor of the kind of contribution these Expert Learners could make, consider the following. In a regular calculus-based physics course where 11 nonscience faculty participated for three weeks, we had dispersed our experimental group among the 280 regular students and asked them to be as unobtrusive as possible. (Nothing will make an undergraduate more nervous than being told that a psychology professor is sitting in the next desk.) One day in this large class, the teacher who had just finished a particularly difficult derivation looked up over his half glasses and asked rhetorically, "Do you understand?" At which point, one of out Expert Learners lost control, stood up, and said "How do I know if I understand?" It was terribly important for him, for the professor, and for all of us who want to improve college teaching to hear that question.

The scientist/lecturer, in turn, was asked to select some scientific concept that is particularly difficult for under graduates but which does not assume prior knowledge and to teach this unit to a group of nonscience Expert Learners. From the journals, notes, and post-course letters of these Expert Learners, I have been able to construct my own answer to the question: What

makes college science hard?

Later, I reversed roles by bringing 14 physical science and engineering faculty at Cornell University into a five-day, intensive class in the poetry of Chaucer and Wordsworth. One of the Expert Learners, a renowned professor of Chemistry at Cornell University, no intellectual slouch, wrote in his journal that he fully expected to have a great deal of trouble with Chaucer. These Expert Learners had been warned that they would translate Chaucer from the middle English. Obviously, Chaucer would be a very distant poet, a subject he knew nothing about. He thought, however, that the Wordsworth poems would be more familiar. After all Wordsworth was a 19th century poet who felt very passionately about nature which this Expert Learner also did. He expected to have a good time with the Wordsworth and a lot of trouble with Chaucer, and then the books arrived: The Riverside Chaucer, which is a large tome of Chaucer's works plus two volumes of Wordsworth's sonnets and elegies with collections in one and the prelude in two different editions in the second. Our scientist wrote in his journal, "When the books arrived, I changed my mind." The Chaucer was organized like a chemistry text with a table of contents and annotated notes; and best of all, the first assignment was on the first page! The Wordsworth was just a collection of poems with no particular structural relationship, and the first assignment was on page 127. He wrote seriously in his journal: "I knew then, and it turned out to be true, that the Wordsworth was going to be harder for me." The difference here is not content per se, but packaging of content...the conventions of teaching. Those of us inside of disciplines forget to notice how very off-putting some conventions are, especially for beginners. A lesson from this research is that when we teach freshmen, we need to remember to tailor our teaching to first-year students by making more explicit some of those conventions.

Another iteration of this research began at the University of Chicago with 30 very, very able learners, master learners from different fields in



the liberal arts serving as Expert Learners. The teacher selected several topics in introductory Physics such as waves in elastic media. He even went as far as to collect a whole counter full of demonstrations that he was determined to get t¹ .ough. One of our Expert Learners commented on the teacher's haste to cover all the material by noting, "While the teacher asked for questions, he obviously had his own agenda. He wanted to get through these demonstrations, so he was a little impatient with the questions." On the other hand in the reverse situation when the scientists studied literature, they were bothered by the fact that the literature professor would take a question and go off with it and just sort of have some fun with it, and then they never got to read the third poem that was on their list which made them very nervous because they wondered why didn't he stick with his agenda? So we have got some agenda adjustments to warn our freshmen about. When we teach, perhaps we need to allay the fears of freshmen if we decide to discuss an issue at length rather than stick to the agenda.

Now back to our Expert Learners in Chicago (i.e., the liberal arts professors studying Physics). One of them wrote in his journal, "I lacked any framework of prior knowledge, experience, or intuition that could have helped me order the information I was receiving." This Expert Learner does not simply listen and take in things like a sponge; he wants to make sense of information as it comes down the pike...a skill we all hope our freshmen will learn. Not all of our freshmen enter college knowing how to sort new information into categories such as important versus unimportant, thesis versus examples of the thesis. We want our freshmen to become this kind of listener. Our Expert Learner from the liberal arts wrote in his journal that he had no way of telling what was important and what was not in the Physics lectures. Clearly the Physics professor had his own way of conveying this information, but the clues were not understood by our Expert Learner from another discipline. He wrote in his journal, "I had difficulty distinguishing between what was being communicated for the purpose of illustra-

tion or analogy and what was pure fact." Educators and teachers must not dismiss this observation from a sophisticated learner who wants to classify things by what is factual, what is analytical, what is illustrative. Rarely are freshmen prepared cognitively to categorize information in such a sophisticated way. Intuitively they will feel uneasy, because the categories are not being made clear. Our Expert Learner continued to write, "I could not tell whether I understood or not. Nothing cohered and this affected my note-taking. I could not write down what I did not understand. It did not help when the professor responded that I will understand it later. If I can't understand it and put it into my own words, I cannot put it into my notes." A very important statement from an Expert Learner. The message to those of us who teach freshmen is: if we are going to ask students to take notes, we must allow them the time and teach them how to translate a new language into their own.

Another Expert Learner in the Chicago experiment said, "I needed a map of the terrain...some road signs or clues to our destination, so I can chose what to focus on and what to skim."

Those of us who teach freshmen, especially in vertical subjects such as Chemistry or Physics, know that the destination is often incomprehensible until it is reached. But these Expert Learners stated a need for some kind of overview early in the course to tell them where they were going, and freshmen deserve that too.

When I replicated the experiment in a longer term, a whole semester of chemistry and physics, employing this time not professors but graduate students in fields other than science, one of the graduate students commented about what was missing for her in the structure and the direction of the course: "I never really knew where we were heading," she writes, "or how much we had already covered. Each topic the professor discussed felt like it came out of a hat. So, I thought Physics was endless. There would always be one more complex way of describing motion. For example, I wanted to know why we began by studying only the



idealized motion of particles in straight lines? The professor started there, but he never told us why. What about the other kinds of motion? If he could tell us what's coming next, if I could know why we moved from projectiles to circular motion at this point in the course, I would find it easier to concentrate. I would know what to focus on." This 23- or 24-year-old-Expert Learner wrote, "The overall effect made me feel like a naive child whose parents tell me one small thing at a time making everything seem equally mysterious."

If you ever go to a science meeting or sit in on a science class, you will notice they use the transparencies on projectors. It saves running to the blackboard and writing unintelligibly. However, the professors lay an object over all of the writing on the transparency except the precise sentence or equation or formula they are discussing, as if freshmen (and even Expert Learners!) cannot focus visually on what is being discussed orally. Thus students see bits and pieces of the whole transparency but may not get a feel for where they have been or where they are going in learning this new material. In other words, freshmen (and Expert Learners, as well) can become lost in the details without ever seeing how the parts fit together into a whole. Many of these kinds of experiences can make very good students, regardless of age, feel more like children than adults.

One other example of being "talked down to" was reported by an Expert Learner, a professor of Speech and Hearing Sciences in Indiana who participated in another replication. In her journal she noted that the Physics course combined in very confusing ways some of the most complex ideas in the history of Western thought, namely Newton's three laws of motion. At the same time, because the professor insisted they use green pencils for their velocity vectors and red pencils for their acceleration vectors and blue pencils for their force vectors, she wrote in her journal, "I felt I was at the 'Run, Spot, run' level of learning." This combination of the most simplistic skills development paired with the sophistication of the intellectual content that

made it hard for her to cooperate...and she was a successful Ph.D.! "Scales, but no music," a lot of the Expert Learners said.

In sum, the Expert Learners from the liberal arts found the demonstrations in the science classes to be hard because they were unfamiliar. Contrary to many scientists' belief that this inability to think abstractly accounts for why so few freshmen succeed in the introductory courses in science, these liberal arts faculty had an indisputable capacity for abstraction. They could even follow the logic of a mathematical derivation or the mathematical expression of a physical phenomenon even if they could not do the mathematics. They could follow the logic of it and understand the symbology. What they found very difficult was the combination of the abstract and the concrete. For example, one of the demonstrations was a wave passing along a slinky. You can see the wave. It is extremely concrete. But then, they were asked to think about resistance from a medium which cannot be seen and therefore is very abstract. The concrete wave and the abstract resistance were packaged in the same moment of the presentation. The Expert Learners reported difficulty when the concrete was paired with the abstract. They did not know what to look for. They did not know whether they had seen what they were supposed to have seen. They wanted the demonstrations done several times... once just to get used to what they were going to look at, to get, in advance, a general idea of what was going to happen. Then they wanted the demonstration described verbally and then done again so they could look at it. One of the Expert Learners made another when he wrote that he had trouble following the demonstration because it was never explained to him where the demonstration fit either into the pedagogical plan or into the history of science. In his journal he asked, "Was this a critical experiment to substantiate theory or was this just a demonstration the technician and the professor had dreamed up in the lab to make the point clear?" As a sophisticated learner, he needed to know that before he could fully understand the demonstration.



In another replication of the experiment a liberal arts professor enrolled in Physics became so lacking in confidence about her own sensory perceptions that she missed the point, demonstration after demonstration. For example, the air track, a frequently used demonstration in introductory Physics, permits the instructor to demonstrate constant velocity in this real world in which we live without air friction or gravity. The air track pushes up a lot of air so that a puck moves along the air track at constant velocity once the puck is set in motion. That is the plan; and that is what the professor sees going on in that air track. But the beginner student (i.e., our Expert Learner) with a very good attention span noticed and was confused by the fact that the puck changed its velocity at either end. It bumped at the ends. Then it came back and resumed a constant velocity. In her notes she asked, "What was the physics of the bump?" Now the professor had never imagined that he should pay any attention to the changed velocity at the end of the air tract because the professor sees very selectively. Since our Expert Learner is a senior professor and not a freshman, she concluded correctly that Physics is "a process of selectively ignoring"...which is exactly what Physics is. How useful it would have been had the professor introduced this demonstration by saying that for the sake of simplifying and analyzing very complex things like motion, we must selectively ignore and in this instance, we are going to ignore the bump. But he did not state critical assumptions that would have clarified the demonstrations.

The following anecdote gives another example of a demonstration in a Physics class that baffled our Expert Learner from the liberal arts who had begun to doubt her own senses. One day in a double story classroom the professor, not a young man, stood on a ladder placed on top of a table. Our Expert Learner wrote in her notes that she was so tense about his falling that she could hardly concentrate on the point of the demonstration. The professor managed to drop two masses of different materials from a great height hoping that the class would notice that the masses of different weights landed at the

same time. By now our Expert Learner was so confused and disturbed by what she was seeing, that she called them the "so-called falling bodies" in her notes. She wrote, "When he got up on the ladder and dropped these so-called falling bodies, one of them bounced. But he never discussed the physics of the bounce." So that is when she concluded that the bounce was selectively ignored.

Others of our Expert Learners also wrote of difficulties understanding how the demonstrations fit in the formulas, how they fit in the science. Professors of science need to hear this kind of feedback because they really do count on their demonstrations to make abstract concepts very concrete and very clear. Our Expert Learners found them otherwise.

In 1989-90, I replicated the experiment, this time using graduate students from the liberal arts who served as visiting Expert Learners in introductory courses in chemistry and physics—the kind of courses freshmen already committed to science and freshmen who are just pursuing an interest in science are regularly advised to take. In addition to complaints about presentation, unclear demonstrations, language ambiguities, and the other matters our Expert Faculty Learners mentioned, these graduate students had much to say about the content of exams, grading practices, and how entire courses are driven by examinations.

One might say (and others have said it before me) that there is a kind of collusion between faculty and students called the exam game. The faculty member has accepted something he believes he cannot do anything about: the fact that freshmen are geared towards the examinations. The students recognize that, particularly in large classes that their examination grade is the only thing that really counts. As a result, as one of our graduate students observed: "Everybody, including the professor, is geared to exams. Sometimes [the professor] says 'you don't need to learn this, it won't be on the exam.' While this provides some welcome moments of relief, his exam-directed statements



reinforce the students' exam-directed behavior."

As a result, she observed, students key into buzz words and catch phrases (the "sound bites" of academe). They write down whatever the professor puts on the board, but not what is said in the lecture. Students do not allow themselves to be turned onto ideas. The graduate student concludes about her experience with general chemistry: "We memorize the pattern and perform the electron configuration problems correctly on the exam, but what do we really take with us after the exam is over? What have we really learned?"

This expert Learner, a Smith graduate in American Studies, had never taken a college chemistry course before. She did outstandingly well in the course she describes. Before you dismiss her as not like your own students, I think there is in every one of these incoming college students, an intellectual fire, a little flame that we must fan.

This same Expert Learner was also put off by the chemistry professor's disdain for students. She wrote in her journal, "Once during a discussion of atomic structure, the professor pointed out that students could think of covalent bonds as an idea shared between two atoms. I followed his train of thought eagerly until he quipped, "if you want to think about this deeply, which I don't suppose any of you want to do..." She wrote, "I instantly recoiled... offended by his remark." The professor talked down to them, and this student wanted to be talked up to.

Language, Definitions, and Teaching Tools

At Indiana University, when we placed nonscience professors as Expert Learners in a regular introductory science course, one of them complained, "There were too many things to do at once. We had lectures; we had a text; we had workbooks; we had labs; we had recitation; we had homework; and we had to study. Why not find one vehicle for transmitting the information required and use that exclusively?" One of the Expert Learners, a professor of Music, found that a key concept in Newtonian Mechanics was

hidden in a caption under a picture. Textbooks in science are so densely written that unless you are very, very skilled at reading captions and footnotes, you miss some things.

Our Expert Learners from the liberal arts knew that the disciplines of science and math use language in very particular ways. In physics our Expert Learners knew that ordinary words will have special meanings and that the meanings of some words may be quite different from what they are in other uses, like normal force. When the instructor taught relativity to this group, he started talking about "static measurement." Our Expert Learner put the term "static measurement" in quotes and then wrote, "I was nervous. Did the professor mean what I think static measurement means such as something that is still (i.e., not moving). Or does static measurement have a particular meaning in the theory of relativity?" This was a very able liberal arts professor who could articulate her confusion. I submit that there are lots of freshmen who would not know why they had trouble following this section of the lecture.

A theologian, who incidentally quipped about the demonstrations that there was so much more equipment in Physics than in his own field, wrote in his notes, "I found the language basically comprehensible, except for a number of BIG WORDS.." he put big words in all capital letters as if he were in kindergarten, "that were undefined such as 'displacement' and 'phase' and then were used in several different rather confusing ways at once." This was a very profound observation. Although scientists pride themselves on using language very precisely, our Expert Learner actually noticed that certain words were used ambiguously. But what bothered him more than anything else was the use of certain concepts that the professor presumed were part of the student's vocabulary, for example, the concept of "zero" or of "zeroness." Our Expert Learner from Theology wrote in his journal, "A non-scientist thinks about 'zero' as is the absence of anything, the absolute bottom or beginning. But to the physicist, 'zero' is actually in the middle with plus or



minus quantities on either side." It really took our Expert Learner a bit of time, attentive though he was to language, to figure out that the lecturer defined "zero" as the middle of a continuum.

Another example of a fuzzy or non-existent definition of a scientific concept in the physics lectures was the use of Cartesian coordinates as a way of thinking about motion. To a non-physicist, the factoring motion into perpendicular dimensions, (i.e., analyzing a falling object by its horizontal motion which will obey certain laws and then by its vertical motion which will obey other laws), our Expert Learner writes, "...is unintuitive. Finally, it was very exciting for me when I gathered that motion is analyzable in these terms. But I needed more time to nail down this concept. Instead, the professor turned immediately, went to the blackboard, and introduced another problem."

Another Expert Learner from the humanities side of the campus wrote in his journal, "In chemistry you don't get into the concept, as I am used to doing, by learning the words. You only really understand the words after you have learned the concept." So the learning of the definition, which was the habit of learning he brought to science, is not going to serve him well at all in the physical sciences.

Another Expert Learner from the humanities wrote in her journal, "I process information in a different way from the way it is used in a science course. I learn to understand by putting concepts into my own language. When I realized I was not permitted to do this (i.e. her own language would not give her credit on the exam!), I was forced to memorize and spit out the words as I received them." Here is a sophisticated learner who had long since abandoned memorizing as a mode of learning; yet she had to retreat to this mode because she was not allowed to do what she did very well.

From yet another replication of this experiment in Nebraska, an Anthropology professor served as an Expert Learner in Physics and wrote in her

journal, "This course did not play to my strengths. I learn things in context by comparing and contrasting. There was no place in this course for me to do that. When I studied with John, one of the fellows in the class and a very successful student in Physics, we seemed to get our wires crossed. When John brought up an equation, I would try to relate it to another equation to help me learn both of them at the same time. This confused the effort. When John worked the problem, he used only what is necessary and brought nothing else into the process. If I'm going to learn the subject, I need to know what is similar and dissimilar. I need to contrast."

The comments from Expert Learners in the liberal arts showed that many ways in which science courses are packaged can trip up freshmen and even cause them to leave the field by changing their major.

Expert Learners in Literature

The Cornell experiment was an effort on my part to triangulate my findings. There I asked the question in reverse. What would happen when we took the Science and Engineering faculty and brought them into a typical literature seminar focusing on two authors and parts of their work? As in the other experiment, I asked our Expert Learners from the sciences to take journal notes about their experiences in this Literature seminar. On the first day of class when Chaucer was introduced, a Mechanical Engineering professor wrote, "The instructor was erudite to the max but said he would be 'low tech vis a vis middle English' since he's not a linguist." Now in this replication of the experiment, I sat in the Literature seminar with the Expert Learners from science, and I can report that he did not say he was going to be "low tech vis a vis middle English." This was a translation that the Expert Learner was employing to make sense of what the literature professor said. In his own terms, the Expert Learner asked, "How can you be a Chaucer scholar and not know everything there is to know about middle English?" Then he answered himself in



his journal by continuing, "I guess it's like being a theoretical physicist and not knowing everything there is to know about functional analysis."

"I asked my first question out loud," writes this Mechanical Engineering professor in his journal. "Why is such and such a word spelled differently on two different lines of Chaucer's Prologue?" That's the kind of observation a scientist will make! "The answer," he continues, "cuts me to the quick. 'The orthography,' I'm told, 'is due to the scribes, not to Chaucer.' And everyone else in the class seemed already to have known that. I began to feel very insecure and wondered why scholars of English literature had not decided which was the correct spelling and put it in all the textbooks. Why after all these hundreds of years of printing and reprinting these texts, did we still have all these varieties of spelling. Why was there no one right answer to the question?"

In the seminar someone asked the next natural question: "What was the driving force behind the great vowel shift?" The Literature professor rolled his eyes and looked up at the ceiling and said, "Hard to say." So our engineer writes in his journal, "Hard to say. Great!" The scientist was thinking actually about the meta-question. Was there a chain of causality...a trans-linguistic evolution? Maybe there is not one. If there is no chain of causality, if cause does not lead to effect and effect is not explicable by cause, how can he, wit!: the grid he brings to this subject, make sense of Chaucer?

These Expert Learners, the scientists and engineers, had just as much difficulty with the delivery system as did non-scientists in chemistry and physics. They described the seminar as just "talk, talk, talk." After the first day an engineer wrote in his journal, "The mode of presentation is certainly different, almost disconcerting. The professor starts talking and keeps talking. Because engineers tend to think graphically and seek structural models for everything, my notes have lots of graphic doodles in the margins; for example, a time line

for Chaucer with the great vowel shift marked in color." (This engineer brought his colored pencils to the literature seminar.) He continued to write in his journal, "I tried an abortive directed graph taxonomy for the Wordsworth, trying to connect the odes, the sonnets, the elegies, and the preludes with arrows." This methodical engineer could not stand the fact that Wordsworth wakes up one morning and writes an elegy, does not even know it is an elegy until it is half written, then turns around and continues work on a prelude, and then does maybe a sonnet before lunch. They had to be connected by something, and that they were not bothered him immensely.

Another complaint: "There was nothing on the blackboard. No diagrams, no key words, no outline, no nothing." Another scientist wrote in his journal, "I found it very hard to follow a lecture that was just words and more words." For those of us who teach in the liberal arts the lesson from this research is: We cannot deliver just words and more words, even though they are the means in which we learn and understand. Remember in the movie, Amadeus, when the emperor told Mozart that there were just too many notes in the opera. Mozart replied, "Sire, which notes would you have me remove?" In the same sense, we cannot just assume that students understand how to create structure or an outline from words.

The scientists also had trouble with the lack of linearity of this seminar; for they are used to vertical subjects. The problem seemed to be one of sequence. A typical comment was, "I'm not sure where we're headed." Remember, the nonscientists also needed to know the overview, where they were going. One journal entry read, "We seem to jump all around. No apparent focus or logical order." But he put the word logical in quotes because he was sophisticated enough to realize there might well be a logic; it just was not obvious to him. Another said, "I got little sense that there was something that absolutely had to be accomplished in any given lecture. If they had to wait until the next lecture, no problem." But that style made him nervous.



He knew he was going to be held responsible for the material, but he felt he did not get any help. The following quote comes from one of the journals: "Literary criticism can be represented as intellectual flatland. I was struck with the intellectual flatness of the field. There seemed to be no strong hierarchy of abstract principles. In Science and Engineering, we try to build multi-story edifices starting from strong but simple foundations with an eloquence and subtly of the principles and relations growing as we ascend. By contrast, studying Literature seems like building and visiting suburban subdivisions. Just drop in anywhere and shout with the neighbors. No neckties needed. If some of the neighbors talk in code and it gets heavy, just move on down the block." That journal entry sounds a little contemptuous and full of humor, but it veils some real anxiety. In general, the scientists felt that in literature courses, while the subject matter was accessible (i.e., it certainly was English), there was no way they could ever interpret the writings, see the nuances, and do with the language what the professor did. So they came out in great awe of Literary Criticism... but absolutely doubtful that it rests on anything remotely like fact.

The scientists enrolled in the Literature class were assigned two short papers. They fully expected to have some difficulties writing the papers, not because they are poor writers, but they know there is a certain expected style in writing papers. But to their surprise, they found some of the topics unintelligible. For example, one typical topic for a Literature class was: "How seriously does Chaucer take the prioress, a character in the prologue?" Those of us already in the Humanities know that this topic is asking us to play with words like serious (or synonyms for serious) and to draw filaments of connectiveness between these words and the adjectives Chaucer used to describe the prioress. Writing well on such a topic reveals that you read the assignment closely, but more importantly, reveals the quality of your imagination.

The scientists agonized over the paper: The topic was not factual and they were not at all

clear about what they were supposed to do. One of the mechanical engineers worked very hard at trying to make sense of the topic and ended up with a two-page paper. His wife, a graduate in English from another college, told him, "It is a good beginning, but the paper is much too short." He said, "Too short? I have written everything I have to say about this question!" He handed the paper in and got it back with the comment in red across the front..."Too Short," and lost credit. Here is an example of a convention that we rarely make clear to students: A certain kind of question, with a certain amount of time, at a certain level of discourse will require three pages or six pages, but not two pages.

These scientists can teach professors in liberal arts about what bothers beginners in any field where interpretation is necessary. One scientist wrote in his journal, "The importance of the concept of absence in poetry bothers me. Unless one has access to a large collection of an author's work, how does one know whether an omission is purposeful or careless?" This may represent a very typical concern from a scientist. Yet absence is an important part of poetry, music, and art. For example, in art appreciation classes instructors discuss the artist's use of space which presumes an intentionality. In this experiment, bright people new to the field were bothered by an intentional use of absence; and perhaps freshmen are bothered by this too, not as profoundly, but unintuitively asking: What am I to make of absence in poetry?

Another engineer wrote in his journal, "I'm used to reading for what is on the surface, not for what is hidden. Poetry seems to favor the expression of ideas in purposely complex and equivocal language." In fact, as far as classroom teaching is concerned, if we were to generalize the difference between the two cultures of the liberal arts versus the sciences we would find that in the sciences very complex ideas are simplified. Therefore, students who are sensitive to complexity may feel is if they are on slippery ground in a science class. They know motion is more complex than the experiment at



hand. Yet, on the other side of the campus in liberal arts classrooms, professors reward the seeking and finding of complexity, so science students who are used to simplifying in order to make sense of things may be at a disadvantage in the liberal arts. Perhaps professors need to talk about this difference between disciplines with freshmen in language they can understand.

In the end, scientists were favorably impressed. One wrote, "I was most impressed by the closeness of the lecturer's reading...the way he moved from the local detail in a single time to the global picture of the poet's work. We in science rarely reflect on global schemes. Perhaps we should tell our freshmen that while they are learning linear relationships in introductory science classes, scientists at the cutting edge are investigating complex non-linear relationships. In the past, scientists dismissed certain complex systems because we lacked the mathematical models and the computers to analyze them."

Another scientist observed, "Scientific knowledge is like a collection of trees. The trunk of each tree must be conquered before the fruit can be eaten. The field of literature is more like a meadow of head-high bushes, so you can get at the fun stuff right away with minimal preparation. The profusion of preliminary grunt work might scare students away from science; perhaps we scientists should do something about that. The interesting part of this experiment is that by becoming a beginner myself temporarily in another field, I am starting to think of new ways to introduce freshmen to the sciences."

And finally, "The reconstruction of the English language after the great vowel shift was based on consistency and taste, two properties that scientists employ in selecting a theory." However, we never try to tell our students. Then he added, "I never really know how good my data is. I am a research scientist yet the models I propose to explain the data never explain everything. The models only approach reality, never reach reality. Somehow this fact reminds me of the ambiguity of poetry. Science as taught

in the classroom does have right answers, but science as a frontier is always subject to just the kind of interpretation that we were doing in this poetry class."

Conclusions

From these experiments of able learners in fields which are new to them, we can draw one of two conclusions. The first conclusion could be that freshmen are differently wired, some for science, some for liberal arts, and that the two groups simply think differently and that they cannot learn outside their area. I think this is an incorrect interpretation of my data and therefore, I offer a second conclusion. Students come to college with academic comfort zones that developed in high school where they may have been more successful in some courses than in others, perhaps because of a favorite teacher, an out of classroom experience, or assistance from parents. Hence they began to think of themselves as weaker in some disciplines. Even our Expert Learners suffer from this. Anticipating having to read some Middle English, a chemist wrote in his journal, "I will not do well in this Literature class because I never learned foreign language successfully." His statement reflects a cognitive self-image, not a measure of his cognitive ability.

As college educators, I will argue our job is to wrench freshmen out of their academic comfort zones. One way to accomplish this is to expose them to the disciplines they fear in a penalty free environment, perhaps through pass/fail courses. Another strategy might be having them enroll in an orientation to the dreaded discipline in order to learn new study and notetaking techniques for the different learning environment as well as for the expectations and language of the new discipline. If educators do not meet this challenge with freshmen, then students will stay in their comfort zones...a failure of educators to meet the needs of entering students.



"Along the Way"

By William C. Hartel

William C. Har

Plenary Address
Small College Conference
The Freshman Year Experience
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Some two years ago I was asked to address representatives of Marietta's Class of 1970 at Homecoming. This had been one of my favorite classes because we had been through a great deal together. I had been faculty advisor to student government during the very painful years of the late 1960s and had witnessed the student unrest on our campus: a student strike, protest marches, and a memorial march for Dr. King. I had been the subject of an "unofficial" investigation by some of my more conservative colleagues for my suspected encouragement of campus radicalism. In other words, this class of 1970 represented a rather dramatic period not only in our nation's history but my own as well. That day as I stood before those former students it hardly seemed twenty years had passed. Suddenly, I realized that I have been teaching freshmen for thirty-two years. What have I learned? I would hope a great many things but one thing for sure: it is foolish to attempt too many comparisons between freshman classes, for not only is each class a reflection of the times, but we faculty members also change with the times. I am not the freshman instructor I was thirty-two years ago, and of course the freshman of 1991 is not the same as thirty-two years ago. Come with me as I take that proverbial stroll down memory lane, not for the sake of misty nostalgia, but for the sake of analysis based on my personal experience as well as my interest in social history.

The Journey Begins

Carl Solberg in his wonderful book *Riding High* provides us with a provocative as well as amusing glimpse into that bygone "feel good" era of Eisenhower. I was very much a part of that era as a returning Korean War vet, for I had a new wife and new child and was taking advantage of Uncle Sam's kind invitation to higher education. After a breakneck speed through my undergraduate education, I eagerly grasped a fellowship at The Ohio State University to pursue my masters and doctorate in the field of history. To my surprise after two quarters of master's work, my academic advisor asked me if I would like to teach a couple of courses with a slight increase

in my fellowship. Before I knew it, I was in charge of two sections of European civilization freshman introductory course. No one gave suggestions to me on how or what to teach. I was never taught how to teach. I was literally almost thrown into the class room - a real old fashioned "sink or swim" situation.

My students, who were not much younger than I, were not nearly as interested in history as I. In fact, I was convinced that they were far more interested in Woody Hayes' great feats with his football team than such things as Voltaire's witty jabs at Frederick the Great or John Knox's not so witty jabs at Mary Stuart. I learned to commiserate with my fellow teaching assistants over the insensitivity of those "cornfed" Ohio freshmen, whom we all were convinced were in training to be future leaders of the John Birch Society. These attitudes about freshmen were also held by most of my professorial mentors. The saving grace for most of faculty was the opportunity to work with, or I should say, work over, a particularly bright, eager, pliable graduate student such as I. While it pains me to admit this now, I soon became just as dismissive of freshmen as my peers and my mentors. I remember too well lamenting with my friends about what a waste it was to try to do anything with "Woody Hayes' cretins," OSU's freshman football players. Teaching freshmen became just a way for me to complete my Ph.D. while my principal activities were involved in graduate studies and left-wing politics. Remember this was the heyday of the Birchers and the big issue on OSU cambus was the so-called Free Speech issue. I should also point out that given the climate in Columbus, Ohio, left-wing was anything to the left of Harry Truman and Adali Stevenson!

The early sixties saw me completing my Ph.D. and heading out into the academic world as scholar and teacher, I suppose in my mind, in that order. For three years I held temporary positions in public institutions in California, Alberta (Canada), and Texas. I was in Canada when President Kennedy was shot and taught in Texas in the town where one of the leading



Birchers had written the "inside" story about the new President in a book entitled A Texan Looks At Lyndon. As some of us remember, these were indeed heady times, a period when many of us asked if our country was coming apart at the seams. I recall trying to explain to a small group of Canadian freshmen about the American Far Right Movement. I also recall an undercurrent of anti-Americanism from some of my Canadian acquaintances, an anti-Americanism stemming from what they termed our "interference" in Vietnamese internal affairs.

A Home at Marietta College

Quite by accident in my quest for a position with a promise of some stability, I found myself back in Ohio. I accepted a position at a small private liberal arts institution on the Ohio River, just across from my native state West Virginia and only some thirty miles from where my mother had recently purchased a home. When I departed from that plane on that April day in 1965 to be met by the Chair of Marietta College's history department, I had no idea that this would become my home for the next twenty-six years.

Teaching at a private small institution was completely new to me, and I immediately felt I had found my niche in higher education. In the fall of 1965 even the sleepy campus of Marietta was beginning to come alive with questions coming from freshmen about the state of the world, the nation, and, more importantly for them, about in loco parentis. I found it all quite exciting as I was being forced by some of these inquisitive students to relate my classes to their own immediate concerns. I found myself asking questions about my discipline that I had never asked before, questions all dealing with the issue of relevance. I suppose what really began to amaze me was that I was learning from my students. I remember the student who just sat and looked at me without taking a single note, a student whom I immediately wrote off as a dud until I read his first essay examination and discovered the depth of his mind. He became my challenge, and I think I became his chal-

lenge. Incidentally, he introduced me to Kurt Vonnegut.

I remember the student whom I urged to read The Feminine Mystique by Betty Friedan coming back to me in my office accusingly saying how dare I upset her so by introducing her to that book, a student who would later shame me into putting my opinions into action by joining her and a handful of students in Marietta's first anti-Vietnam War march. There were long hours of private heated discussions with one of our freshmen, the brother of Rennie Davis, over the necessity of analyzing problems in society rather than simply "acting." There were times in class when a young radical would yell out from the back of the room that while we were wasting time talking about Marxism, others were in the streets doing something about injustices. My radical students would shake their heads as I spouted such platitudes as "the middle class will shoot its own if that is necessary to preserve order." Then what many of us feared would happen, did happen: Orangeburg and Kent State!

Orangeburg and Kent State proved to be turning points in our history and in my own personal journey. The post-Kent-State student population indeed has been different. One of the several deans I have been associated with remarked in a faculty meeting, "Isn't it wonderful? We can now teach again." I translated that to mean, "Isn't it wonderful that they now will take what we say without questioning." I was beginning to become disenchanted. I threw myself wholeheartedly into the political campaign of George McGovern and declined to continue to be the advisor to Student Government. My energies were being divided between the campaign and the students, with more and more going to the campaign and the small brave band of students I worked with who believed in the concept of grass roots democracy. I was almost devastated with the outcome of the election but perhaps even more devastated with the obvious bitterness of those students who had worked so hard with me. Perhaps I should not admit this, but I became recharged again



with the unraveling of the Watergate scandal and in my heart felt vindicated when I watched Richard Nixon announce his resignation on television in 1974. Perhaps the final words in that chapter in American history were those that announced the withdrawal of our Ambassador from Saigon in 1975. I can still vividly recall that television image of the helicopters lifting off from the roof of the embassy with the wild crowd of Vietnamese left below.

The Freshman Year at Marietta College

That same year, we at Marietta began to reexamine our freshman year. The motivation was mixed and rather convoluted, but mine was rather simple: I needed to make contact with the student of this new era. We introduced a high-powered one-section seminar in the Humanities geared towards the better student, a seminar that focused on literature and ideas. The subject of that first special seminar that I team taught was "The American Frontier." In order to secure funding for what we hoped would be an expanded program, we applied for grants. A representative from the National Endowment of the Humanities visited our campus and wrote a subsequent incisive report on the state of our institution. From this report, the following important outcome emerged: a decision to concentrate more on the quality of entering students with the understanding that in order to retain them we must review the institutional concept of advising. I was honored by being involved in this review, and by 1978 we had embraced as an institution the idea of holistic advising. In other words, we were going to institutionalize the close relationship that many of us had experienced with our freshmen in the late 1960s.

I might add that it was at this time, the time frame between the fall of Saigon and our new advising endeavor, that I had a particularly moving experience in one of my classes. I was teaching the history of American Foreign Relations in a class of about forty to forty-five students. As I was lecturing about the diplomacy during the Civil War era, I suddenly became

conscious of seeing only the tops of heads as each student was busily taking notes. In an instant of madness, I began lecturing about a vast conspiracy going on in Lincoln's Washington: a conspiracy involving the new Republican party, Wall Street, Anarchists. It became wilder and wilder; but still I saw the tops of those heads as they were busily trying to get these "gems" down on paper. Finally I stopped. A couple of minutes must have passed until they raised their heads to see if I had dropped dead or simply disappeared. I looked at them and said something to the effect, "Did you really believe all that garbage I was telling you?" In a voice full of despair, I dismissed the class. As the students were shuffling out of the room, one lone student stopped at my desk, looked at me and said, "After Watergate, we would believe anything!" That experience convinced me that I could not give up on these students, that they did care, they were concerned; but unlike my former students, they understood their world all too well. I realized that I would have to work twice as hard to reach my students but that it would be well worth the effort.

One of the perks that went along with my new role of revamping the advising program was the opportunity to go to various conferences in the hope of finding out what others were doing. In the academic year of 1979-80 I journeyed to Wichita or Kansas City and attended a national conference on advising. I found myself at one of the concurrent sessions listening to a man talk about his bad freshman experience at his own alma mater, Marietta College, and the freshman program with which he now was involved at the University of South Carolina. Thus began a long and productive professional relationship between John Gardner and myself.

In the late spring of 1980 I participated in South Carolina's faculty training workshop for the University 101 course and returned to Marietta College full of ideas, inspiration, and a couple pounds of handouts! That fall I taught a section of a course called College 101, a course based on USC's 101 but adapted to our campus. Just as the nation was entering into the so-called



Reagan Years, Marietta College was entering into our College 101 Years. Whereas the political pundits of this era were wont to point out that what was needed was "less government on your back" and the dominant media message seemed to be that this was a period of rampant individualistic greed, we in academe were discovering that freshmen need and want more services and assistance. The emerging academic message seemed to be that we were willing to step outside our own narrow academic discipline in order to facilitate student success.

The Freshman Year Experience movement coincides with the 1980s and the Reagan Years. For me, the historian, the Reagan and Bush years represented the proverbial dual-edged sword: nationalism at its ugliest in Grenada, Panama, Nicaragua, the Persian Gulf; environmental disasters both real and legislative; urban deterioration; social disasters as reflected in homelessness; skyrocketing health costs; callousness displayed towards AIDS victims; and the deepening chasm between the rich and the poor. On the other side was my own personal growth: a deepening of my understanding of my own role as a teacher of first-year students; a greater sense of satisfaction, which has made me, in general, a better teacher; and, finally, a feeling that higher education is now, more than ever before, ready to accomplish great things.

What I Have Learned

Let me elaborate, not on the political, social or economic scene, but on my own personal history in this decade. What have I learned?

Investigating Learning

For the first time I began to investigate the way one learns. I began to examine issues involving pedagogy. I attended workshops on critical thinking; listened to discussions on the works of such as Perry; attended meaningful workshops on such subjects as student's moral development; worked with experts on career advising and study skills; and learned how to appreciate and utilize such tools as the Myers-Briggs Type

Indicator. In all this process I was enriched through a new understanding of teaching and learning. I might add that I have been fortunate to work at an institution that views such developments equally as important as publishing in a major field. Not all institutions take the same view.

Effective Teaching

The second thing I learned was that working with first-year students in College 101 which emphasizes both cognitive and affective skills made me a better teacher in my discipline. Perhaps better is the wrong word because such an evaluation might be difficult to prove, but it has made me a more thoughtful and careful teacher. I am no longer so intent on "teaching a body of historical material," but instead I am more intent on processes. I am still concerned, for example, that my students see the connections between Robespierre and the development of the western Socialist tradition; but I am equally concerned that my students understand causal relationships, are able to construct analogies, and can comfortably communicate ideas through both the written and the spoken word. In that respect I have come a long way since 1959.

Environments for Learning

The third thing I have learned is really nothing new, but merely an enhanced understanding that all segments of the academic institution have a equal responsibility for providing the proper environment for student learning. There must be a firm partnership between the faculty and student services. For example, in a residential institution, residence halls become crucial learning centers. The faculty must work with the residence hall personnel to coordinate their efforts in order to provide the optimal conditions for positive learning. At the same time faculty must welcome into our classrooms student service personnel in order to share their own particular expertise. All of us who are employed on the campus are teachers in one way or another. When we work together, we learn to respect each other, empower each other and thus provide that necessary learning



environment for all our students.

Institutional Commitment

Finally, I have become more committed to my own academic institution. At one time there is no doubt, that I thought of myself as a historian. In 1965 my intellectual commitment was to a discipline. My personal evolution was relatively gradual. Do not misunderstand: I am still a historian; I yet feel that excitement when I am hot on the trail of some evidence to buttress a concept about history. I still read voraciously and, of course, become dismayed at all there is still to learn. I still feel that thrill when I am able to impart to a student a beginning of an understanding of the commitment to social justice of an Emma Goldman; however, I feel that my loyalty and commitment goes far beyond my discipline, my department, my academic division. These last ten years have finalized for me a commitment to the institution: not simply because of the length of my stay with it and therefore it has grown on me, but because I now better understand the concept of the total student. I know that it is the process of learning that counts; and that process occurs in the classroom, on the playing field, in the library, on the theater stage, in the concert hall, on the campus green, and in the residence halls.

Preparing Students in the 1990s

What about today and tomorrow? What are the needs of the students of the 1990s? What will they need to prepare them for the 21st century? Most historians learn very early in their careers that it is foolish to attempt to predict the future. The study of history certainly does not guarantee a understanding of what is to come. I can only speculate. I strongly recommend Neil Postman's incisive analysis of our electronic age entitled Amusing Ourselves To Death. Those of us who were formed by the print culture will increasingly find it difficult to apply the same standards, the same approaches to students as we once applied; and we must be careful not to say such things to our students as, "You aren't as good as students used to be." We as teachers must constantly seek ways to engage our stu-

dents and keep up with the pedagogy. In addition the world "out there" is indeed in flux these days. The Cold War is over. We are now using such phrases as The New World Order. What will that Order be? What role will our students have to play as world citizens? The responsibilities that they will have to shoulder, the decisions that they will have to make, the commitments that they will have to adhere to will undoubtedly be different from those of the past; and therefore we have to be ready to meet these new responsibilities with perhaps new methods of engagement within the world of academe.

Finally as we look at the present and the near future, we all are perhaps painfully aware of the financial strains that are and will be placed on our academic institutions. Therefore it is not so much a question of will we be willing to meet the needs of our students, but perhaps will we be able to meet those needs? The road ahead will probably not be smooth, but has it ever been?

A Sense of Accomplishment

As for me personally, I look forward to continued involvement with students. Someone recently asked me when I would retire; and I answered, "When it is no longer fun to teach." It is still fun for me; it is still a challenge. I still feel that shiver of triumph when that student who has been silent for most of the semester, finally holds up that hand and haltingly makes an oral contribution to the class. It is also fun to work for the common student good with bright young student service personnel, with dedicated upperclass persons, and with eager-to-learn new faculty as I am privileged to do at Marietta College. I have learned a lot "along the way." As I look now both backward and forward, I feel pride, honor, and gratitude at being privileged to "toil within the vineyards of academia."



"Is Student Success Really A Serious Concern at Today's Universities?"

By Stuart L. Smith

Stuart L. Smith

Plenary Address
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After many years of experience in teaching and administration at Canadian universities, I have realized that you as freshman educators and I share the fundamental notion that universities are student-centered institutions. It matters to us whether students succeed. Society shares this fundamental notion as well. The people who fund our universities also believe that universities are focused primarily on graduating students who take their place in society as productive citizens. That's what society thinks it is paying for. Society has accepted, in North America at least and elsewhere, that the people who teach at universities can carry out and should carry out their own scholarly work as a means of doing two things: enriching their ability to teach and advancing the knowledge which society requires at the frontiers of learning.

This does not mean that society believes that university professors are not part of an overall education system. The people whom I represent politically and the people with whom I interact believe that universities are part of an overall educational system. The fact that they have a specific goal, teaching as well as research, does not in any way take away from their responsibility and their privilege to be in the educational system.

It may seem odd to state the absolutely obvious to people in the educational community. But I must tell you that many faculty members, particularly in those faculties which do a lot of research and have a lot of graduate programs, believe that this philosophy is absolutely wrong and is considered to be heresy—very dangerous heresy at that.

Fragmentation

When I was a student at McGill in 1954, and when I left North McMaster in 1975 after being a professor for eight years, I had no idea that this kind of feeling existed among my teachers and colleagues. I may have been oblivious to it even though I was given the privilege of going across the country and listening to hundreds of

presentations; reading 300-400 briefs, talking to people, visiting colleagues, I was not prepared to hear this type of criticism from my colleagues. I did not enter upon this task as a commissioner with a preconceived notion that the academy was that far out of touch with the role of universities in our society. That only became evident after I heard from hundreds and hundreds of people right across the country. It is no different in any part of Canada. There are exceptions at institutions that have very little graduate work going on and hence have an undergraduate orientation and tend to feel themselves as part of the teaching concern. Whereas, the dichotomy that I'm speaking about seems to occur more in the larger research universities where there is a lot of graduate work and where there is fragmentation by departments.

With the knowledge explosion, disciplines have proliferated. A reductionist method exists which seems to be heuristically valuable although it is being questioned now by those who favor interdisciplinary work. If you're a professor of a sub-discipline and you want to know whether you are doing a good job, generally only someone else in your sub-discipline can tell you that. The only way of receiving feedback and advancing one's career is by publishing journal articles. This has become the dominant concern of people in the academy. This is what academicians are concerned about and that means they have opted, in a sense, out of their institution and into their discipline.

One would think that the institution might have come along and attempted to counter that notion to some extent. Evidence of that was sought when I was on the tour, going around the country listening to people. In fact, what I did find was that the universities themselves have become complicit in a sense because their reputations have come to depend on how many star performers they have in each department. Even if the university declares in its own overall mission that is not what they are about, the individual departments find that their collective prestige depends on how many research stars they have. The universities have in a sense



advocated the forces which the knowledge explosion has created and set loose. The forces for the discipline are not being countered by anybody on the institutional side in Canada.

Now there are other players in the United States. For example, the parents of students pay huge fees. There are donors of large segments of the American system supported by philanthropic activity, foundations, and corporate donors who could bring other pressures. In Canada, there is no other possible source of pressure except the government. I will discuss that later because we all know what a two-edged sword the government is for a constructive activity.

More Students, Fewer Resources

The universities are feeling the pinch from the explosion of enrollment which has occurred without concomitant increases in their budgets. Faculties are being asked to teach more for less, and their emotional reaction was that of a people nursing a sense of grievance, a sense that they were unappreciated, misinterpreted, misunderstood. They could not believe that society would knowingly ask them to teach more for less, thus depriving society themselves of the other excellent work which these people. want to do. It seemed as though they were ready to complain about the effective underfunding. They saw the Commission of Inquiry on Canadian University Education as an opportunity for society to do more for universities. However, the Commission suggested to the universities that they do more for society. The reactions of the academicians were not very positive, and they are torn between implementing or shelving the report. It will be a few years yet before we know which side actually wins. Even so, the sense of being unappreciated came through.

Another impact of the shortage of funds is the disrepair of university facilities. The roof is literally caving in at different places and the choices have been made to maintain the core of their facility and to allow things at the margin to

deteriorate. The physical plant is considered marginal. Many professors complain of the difficulty in teaching classes that are extremely large. When I was at McGill the total enrollment was a size that would now be considered an intimate, small, liberal arts college. Things have certainly exploded in terms of enrollment. Classes are much larger and the students are also very different. Students are accused of having priorities other than their university education, which is certainly true. An enormous number of students are working part-time jobs that look a lot like full-time jobs. Some students' only contact with the campus is the lecture room and the parking lot. Many of the students are not as well prepared as perhaps they used to be or should be. The people in the academy are very upset about being asked to carry a burden which they thought other elements in society should properly carry. That is the kind of grievance that I kept hearing about.

Academicians do not recognize that all industries nowadays are faced with the same crisis. Every industry has to produce more for less: this is the name of the game for them. This is true of the public industries such as hospitals, libraries, and city infrastructure, as well as private industries. The difficulty is, of course, to do that without sacrificing quality; that is what global competition is all about: maintaining productivity without sacrificing quality. Universities are being asked to do exactly the same thing, and their response is utterly perverse. To begin with, universities do not appreciate that they are being asked to do exactly what everybody else is being asked to do, rather academicians sense that they are being picked on and unappreciated in some particular way.

Industries respond by doing research and development, by finding new ways to do things. Innovative forms of management are developed. Reward structures are changed. Methods of quality control are attempted. This is how industry deals with these kinds of challenges. But universities feel there is nothing to learn from industry and have adopted other methods of dealing with this challenge: complaining and

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increasing the size of the class or decreasing the cost of the teacher. Their answer to the productivity crisis is simply putting a cheaper person in front of students, and they hope that, as far as quality goes, nobody will ask any questions. There is a quality dilemma here in all fairness. If somebody accuses universities of allowing quality to deteriorate, they become very defensive. On the other hand, if quality is still good, the possibility exists that their budget may be cut even further. Universities are caught in a terrible dilemma. No one wants to be the first university to admit that their quality has deteriorated to the point where they can not seriously offer honest value for the money being received. The government has the universities in a dilemma on the quality issue and it is not entirely the universities' fault.

Many faculty want to improve the student experience. Every university across Canada wants to improve the student experience, but at virtually every institution, the complaint is that those kinds of activities are not recognized, are not rewarded, and are considered a labor of love. Those who concern themselves with the student experience are doing so because they are personally dedicated and gain satisfaction from doing it. The organization itself does not attempt to motivate its people to improve the student experience.

Improving the Student Experience

Time

There are several strategies that institutions can implement to improve the student experience and improve productivity and maintain quality. Universities might respond by saying, "We have to teach more students, and we do not have as much money, so our professors will have to teach fifteen percent more hours than we've been teaching." Over the last 20 years of underfunding, one might have expected to find an upward curve which shows that there has been an increase in the number of teaching hours per professor to a certain point beyond which the scholarly work would be compromised and so it would plateau. That upward

curve was sought, but the universities claimed not to have any data. This is, of course, the universities first answer to all inquiries. Universities claim to have no money to collect that kind of data. However, universities can tell you instantly how many people get grants from the granting council and the exact size of those grants. They can tell you instantly how many faculty won prizes, and how many incentives of excellence were awarded to them. The universities say that they do not have data on teaching hours. Each year in the United States data on teaching hours for every category at the universities is published. Canadian universities deny having those data. Despite what universities say, data on teaching hours was found. The deans have this type of information. After examining this data, no such upward curve was found at all; instead, a steady downward curve was discovered in the number of hours taught in the classroom by each professor across time and paralleling decreases in funding. In spite of enrollment increases, data show a downward curve in the number of hours taught per professor. The evidence is very plain that the current average in Canada for teaching hours by professors are six and a half to seven hours per week on the average. No one is willing to teach an extra hour or two so that each class could be smaller. Professors would rather complain about the number of people in their classrooms than volunteer to teach more classes. This is the first bit of evidence revealing they are not too concerned about the student experience.

Teaching

The second bit of evidence exists: if universities were in the business of improving the student experience, they would attempt to teach better. Those who were better teachers would be well rewarded, and everyone would know who got the rewards. Everyone would know the tremendous benefits which come from being a superb teacher, such as finding ways to create small group learning; rearranging the curriculum so it is accessible to people; making self-directed learning a possibility; and using exciting lecture methods, multi-media, and computer-assisted education. Those who have succeeded with



innovative teaching techniques should be singled out for praise, advancement, raises, and promotions. The reward system does exactly the opposite. Those who actually reach out, arrange continuing education, part-time education, distance education, and creating accessible education for disadvantaged, do so as a labor of individual love and not because they seek special rewards. Educators have said we sacrifice our chance for promotion at this university by emphasizing those kinds of educational activities. Rewards exist for publication in the research area and not for teaching innovation.

Universities do not ask people to teach more, and do not reward teachers for teaching better. Student ratings, if collected at all, are done very badly. If they are done well, they are rarely taken seriously. The teachers who do come on staff are not examined to find out whether they are good teachers; they are usually hired for reasons other than their teaching ability. Those who are going to become teachers are rarely given training at becoming teachers. Those who are teachers are rarely given faculty development to become better teachers.

There are indeed faculty development offices right across the country which are gradually becoming more prevalent. But the average staff of the faculty development offices is one-half person. The people who come for help at these offices often turn out to be people of the extremes: those who are already good teachers and enjoy talking about teaching versus those who are so bad that they are about to be dismissed from the university. Generally, these faculty development efforts are exciting and show a lot of promise. They should be supported by universities and government agencies. Even so, they are still very marginal.

The academy rewards faculty members by reducing their "teaching load." Nothing else is referred to as a load at the university: only the teaching hours. The teaching load is used to reward people. The load is lessened for those who deserve rewards. Universities are an industry which is far from doing any of the

things that you expect it to do: to respond to productivity, quality, trade-off, and challenge. Universities are doing everything to indicate that they do not even want to be in that business; therefore, one can only assume that universities are either unconcerned or disdainful about the quality and quantity of teaching done by the professors.

Since universities seem not to care about teaching, perhaps they hope the students have somehow managed to learn on their own. However, when we asked a simple question: "How many students actually finished the course that they started?"...no one knew! The most shocking thing about attrition data is the difficulty in obtaining facts. Attrition does not seem to be of great concern to universities. Universities either do not care whether the students actually finish or else they enjoy the fact that many of the students do not finish. Perhaps universities are reassured by the fact that students fall by the wayside, reassured that their standards have not been diluted or their chance of becoming a top ranked university has not been lost.

Research and Development

Attrition rates, when available, indicate that somewhere between 20 and 45 percent of students were not finishing, but we do not know what happens to them. They might have transferred to another university or to a community college, but there are no facts and figures. No one has bothered to research this issue. The university system does not perceive this as worthy of university research, further evidence that universities do not believe they are in the teaching business. Yet there exists some evidence that indicates there are ways to improve student retention and the student experience. Even in Canada, there are many experts on student retention. Several interesting experiments include the following: Dalhousie where the students are assigned to a cohort when they arrive; the University of Winnipeg with its extremely innovative writing program, has done a great deal to improve their retention rate; the University of Quebec at Montreal, which is



attempting to improve the experience and retention of students; and the recent experiment at Calgary which reduced the attrition rate by half; and the first year experience program at Guelph. The positive results of these programs are of no interest to anyone except the people participating in them.

In order to increase productivity with fewer resources, industries might respond by doing research and development. There is very little research and development being done at colleges and universities on student experience and teaching. The size of the educational budget compared to the size of actual research into the delivery of education is much lower than all the industries that we criticize for being complacent and not doing sufficient research and development. Universities urge industries to do more research and development, when universities themselves are deficient in doing research and development on the educational enterprise. Those few dedicated scholars who do research and development on educational matters again are marginalized on the campus.

In America, there is a fund for the improvement of post-secondary education, but Canada does not have one. Recommendations have been made for the establishment of a fund for the improvement of education, but there are no indications that anyone will act on that recommendation. The irony of urging other industries to increase research and development and not doing research and development ourselves, seems to be lost on most university administrators. The faculty of education where educational research might occur was the faculty with the least prestige on the Canadian campus. The education faculties, perhaps vying with forestry for instance, are perceived as having no real usefulness and must be set aside, or marginalized, and not be allowed to take over.

Another problem became obvious in the use of educational resources across Canada. New professional faculties of education, nursing, social work, physiotherapy, administration, and business, which are recent arrivals at the univer-

sity in historical terms, invariably have the fewest faculty members, fewest square feet, and fewest dollars per student. These departments are cash cows for the rest of the university. The academy protects itself against these highly useful people by disdaining them. Anything that reminds university professors that they are merely more advanced high school teachers is the worst conceivable insult that an educator could receive. They would sooner be mistaken for a taxi driver than to be mistaken for a "school teacher" because we know that politicians would have us teaching 30 hours a day with no time for our research if we let them think for a moment that we are really teachers. We must avoid that at all costs. This is, of course, the attitude that we see.

The only sensible conclusion one can reach, is that most universities in Canada, act as though they do not believe that they are in the teaching business. Research is permissible, but universities do not really want to do what society thinks they should do. The implication for those who are interested in student success and the student experience is that your work often goes unnoticed. The difficulty we have is making our work a mainstream activity at institutions. This is much easier at community colleges. Community colleges have always been in the teaching business which is why they were set up. They have no intentions about competing with Harvard University. How well their students perform is important to community colleges. They want their students to succeed; they want employers to be satisfied with the students; and they want students to get a job once they graduate. Community colleges are not pulled into seclusion of the disciplines. It is easier for teaching and the concern with student experience to be accepted at community colleges, but at universities, there is a serious split in opinions.

Public Accountability

Perhaps the time has come to implement governmental action using public accountability as a tool. A government bureaucrat telling every



university what and how everything should be done is not necessary, but perhaps the government will insist on a plan of public accountability. When universities are required to provide public documentation of attrition rates and their admission requirements, universities are held accountable for their claims of accessibility. When these facts are known, there are sensible questions which the governmental employees can ask when the university presidents visit. No longer could university presidents attribute high attrition rates to accessibility. Government officials could ask universities: "Why do those equally accessible institutions have lower attrition rates than your institutions?"

Under the current system, what can a government official possibly ask a university president? "How are things? Did you have a good year?" There are no sensible questions officials can ask because university presidents present data in the form of huge smoke screens. According to university presidents, the officials get along very well with them, but presidents do not seem to understand why officials keep cutting university budgets every year. Presidents would argue "Government officials are cutting budgets because there is no money, but they really like us." When people on the commission asked anonymous government officials across the country in a selected sample, officials spoke frankly and the report on university presidents was scathing. They spoke of university representatives shoveling fog, of the unreality, of the lack of connection with the real world. Officials will never say that publicly. After the formal greetings and niceties are completed, Government officials say: "Yes, I wish we had more money for you, but you know we have these hospitals. It's a tough time." University budgets are cut, and presidents leave these meetings thinking: "Well, they love us, they just don't have any money for us." It's simply not true. Officials do not love university presidents. Officials, who care about students, know perfectly well that universities often do not act like institutions that care about students.

Accountability measures, such as surveys, could

be sent to graduates at four and eight years after graduation to determine satisfaction. Research could be conducted on the direction and magnitude of graduate satisfaction. Employer satisfaction with students who graduated from universities can be measured through surveys. Important information can be obtained in this manner. Community colleges often do this. University attrition results can be publicized. A test of writing skills administered upon entry and exit from institutions would yield an aggregated writing skill improvement score for each university. Some universities claim: "Our students don't do terribly well on some of the postgraduate exams. But, after all, we're an accessible institution. We take in people who are not that academically inclined." Universities who make these claims ought to be delighted with such a score because they could show a value added which the people coming in at the top would have difficulty demonstrating. But so far, no university has taken the initiative to implement such a program. Not even the University of Winnipeg, which has a wonderful writing program, has examined this possibility. When asked why they do not post-test their students using the same test, the faculty at the University of Winnipeg were really threatened by that. The faculty responded: "You know, we're not teaching people just to do an essay like that. We're teaching people to do a portfolio of writing and they must understand writing in many drafts. You don't just write something the first time; you write it several times." Would these faculty members be disappointed at all to find out after all these years of teaching students to write that their scores on the initial test were no better than they were four years earlier? Their first answer was no; but then they admitted that they would be disappointed.

Publicizing the portion of graduates that get into graduate school and the proportion who receive post-graduate awards has been suggested. These are the kinds of things that people want to know. The same universities have complained about *McLean's* magazine because they did a *U.S. News and World Reports* type of rating on our universities. *McLean's* used some disputable



criteria. But these same universities refused to provide evidence of other criteria that make sense. Accountability seems to be the answer.

There is also accountability regarding how important teaching is at a university. The number of hours a faculty member teaches, the proportion of entry level courses taught by senior members of the faculty, and the median time to receive a masters or Ph.D. degree must be publicized. The median to Ph.D. from bachelors in the humanities is nine years. Everyone says "That's all right. What's wrong with that, Stuart? What are you complaining about?" In my own experience, it took me four years to get a medical degree in 1962; and it still takes four years to get a medical degree. It took four years to get a Ph.D. after a bachelors degree in 1962, but now nine is the median. Knowledge is expanding and it takes more time because students are working part-time and drop in and out. Students are not in a great rush anymore because the job market and the academic market are not so good. Another reason that students are taking longer is that the whole process of supervision has broken down. No one is supervising the university professors. A supervisor and supervisee are in a relationship which is very private. Currently, no one holds that supervisor to account for not meeting the milestones and not arriving at each of the planned points along the road at the appointed time. In business, you hold people accountable. In most institutions people are held accountable. The supervision of graduate students is something which does not occur. That is at least one of the reasons, among many, why it is taking so long.

These statistics, the average class size, attrition rates, and teaching hours, should be made public. The percentage of university budget used to improve teaching is something which all universities should publicize. Then when university presidents meet with government bureaucrats, they have pertinent data.

I have recommended that at universities, professors be allowed to choose, in consultation with their department, whether they wish to be

judged for promotion and tenure primarily on research or primarily on teaching; but not one to the exclusion of the other. In other words, professors should show excellence in either teaching or research, and competence in the other. If that system were put into place, statistics could be gathered on what proportion of professors chose which route and the success rate in each of these routes. These measures would also provide interesting information which would give government bureaucrats and university presidents something to talk about.

The government, so far, has decided to avoid controversy. The government has taken the view that cutting university budgets is much easier than getting into arguments with articulate, intelligent, well-connected people like university presidents. Government officials do not realize that the only way university presidents will have power to make changes on campuses is if the government forces presidents to make changes. Presidents have no power on university campuses today. Everything presidents do on university campuses, must be done by consensus with senior faculty members. If a president cannot get an order to make changes from the government, then there is no possibility for change to occur. Up until now, the politicians preferred to stay out of arguments with university presidents because there is no benefit for the politicians and the average citizen does not understand or care. So if we do not get action from the government, there is no hope of enhancing the student experience through accountability.

The majority is concerned with quality teaching. When those who are concerned with the first year experience, with teaching, who love teaching in the academy are considered; when those who are concerned with all the new professional schools, with continuing education, distance education, part-time education, and those who want to implement innovative teaching techniques are taken into account, they constitute a majority. But they do not have power. Only the government can empower individuals who are concerned about education.

We know how to create conditions for learning. We know how to revise materials so they can be used for self-teaching. It was done at McMaster, and that was one of the most exciting things I have done in my life. We know that scholarly work is much broader than just research articles; for example, revising curriculum is very scholarly activity. Totally remapping the curriculum for self-learning rather than for the usual lecture method is one of the most scholarly activities, but is rarely given the credit it deserves. Innovative, interdisciplinary work, which supplies new hypotheses through research, does occur. Co-op teaching, which has been very popular in Canada, assists academic departments in focusing their priorities on research that is important to the industries of the country. There are many reasons for improving teaching and research together. They need not be competitive with one another. They can enhance one another; but currently, only research is emphasized through the reward system.

The Commission's report is designed for educators who are interested in keeping and stimulating students who come to college for learning. Hopefully, this report will help educators gain acceptance within their own institutions by conveying the concern for student success to university presidents and government officials.



"In Search of Hope and Heroes"

By Laura I. Rendón

Torre T Ren

Plenary Address
Regional Conference
The Freshman Year Experience
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Every once in a while, when I am feeling a bit nostalgic, I pick up my 1966 Martin High School yearbook and flip through the pages. I grew up in Laredo, Texas, a small south Texas city where Spanish was the dominant language and Mexican-Americans were a clear majority. As a child of the wonder years, the 1960s were full of promise, idealism and seemingly endless possibilities. Yet, while the youthful rebellion simmered, a war in southeast Asia was intensifying, and confrontation between races, genders, and generations would tarnish the decade. Looking through my high school yearbook reminds me of a time which was both bleak and beautiful.

During the 1960s, I graduated from high school and a whole new window on the future opened for me when I became a freshman at Laredo Junior College. In the 1960s I had to deal with being a minority when I transferred from Laredo Junior College to the University of Houston. During these years, I became identified as a member of the "far-out generation," a group which has become the "Yuppies."

My heroes in the 1960s were John F. Kennedy, my science and English teachers, and the musical artists of the day whose lyrics reflected my values and idealism. Hope, for me, rested with realizing the idealism and dreams of my generation which were embodied in my heroes. Films like "The Graduate" energized me to believe that some day I could do something to make this world a better place to live.

In the 1970s, and particularly in the 1980s, I lost touch with that sense of hope. My generation moved away from issues of equity and compassion for less fortunate Americans. I became dismayed when my generation too hastily embraced the concepts of the new "economic man," which advocates that we provide only the bare essentials to the needy; and programs for the economically disadvantaged should be a private venture, not a public duty.

As the curtain rises on the decade of the 1990s, however, my hope and optimism have returned due to a change in the American conscience. A

May/June 1989 Gallup Poll reported that the American public is now ready for traditionshattering changes in policies that govern public schools. Specifically, 83% of the American public believes that more should be done to improve the quality of education in poor communities, and 50% of those surveyed say they are willing to pay higher taxes to finance such improvement. My new hope is that my generation, now commanding leadership roles, can do something to turn our educational system around. Quite simply our future is at risk because our schools and colleges are failing our students. If you want to see the prelude to the future, go to elementary schools in Los Angeles, New York, Albuquerque, San Antonio and other urban centers where minority students are now the majority. You will not like all that you see.

Education That Fails Children

In January 1990, the Resource Group of the Carnegie Corporation's Quality Education for Minorities Project released an action plan, Education That Works, which details goals and strategies to reduce the educational achievement gap between white and minority students. I served as a member of the Resource Group; and when we visited urban centers which house American Indians, Alaska Native, Blacks, Mexican-Americans and Puerto Ricans we found that from New York to Los Angeles, from Alaska to Puerto Rico, the educational system had failed minorities.

In the K-12 school system, we found that minority students were treated differently from white students. Teachers' low expectations of minority students were manifest through the message to minority students—"you will amount to nothing." Minority students in urban centers attended schools with outmoded curricula, crowded classrooms, inexperienced or low-yield teachers, and few educational resources. Additionally, these students experienced classroom environments in which keeping order took precedence over interactive learning and problem solving. Moreover, minority students were often tracked away from courses which would



prepare them for college and took courses which were less challenging. Some children were even placed in low-ability groups or special education classes. Unless drastic changes occur in our elementary and secondary schools, our college student population will be comprised of predominately at-risk students.

An examination of the higher education system revealed that minority students are underrepresented due to the decrease in the number of students who progress from high school to college. In the general population, 25% of the 18- to 24-year-old segment is minority. In 1986, about 14.3% of these minority students were enrolled in college. Fewer minority men than women were enrolled in college. Only 40% of Black, 47% of Hispanic, and 43% of Indian college students were men. Of the few minority students which enter college, even fewer earn college degrees. In 1987, Indians, Blacks and Hispanics made up 15% of all undergraduates, yet received only 9% of all bachelors degrees. White students have earned bachelor degrees at twice the rate of Black students and three times the rate of Hispanic students, while international students have earned nearly four times as many doctorates as have Indian, Black, and Hispanic students combined.

Action for Access: What needs to be done?

1. Dispel the Myths About Minority Education. Some misguided beliefs about educating minorities have permeated our schools and colleges. In higher education, the myth that student diversity threatens standards and diminishes excellence is often expressed. This myth is based on an elitist model which advocates that only a few can achieve excellence. Yet, we must remember that nature itself thrives on diversity and that diversity is the key to human survival. Johnnetta Cole, the dynamic president of Spelman College, reminds us that "excellence in the academy demands and requires diversity."

Additional myths are equally damaging and demeaning for minority students. The view that minorities are less capable than white students

and do not care about education is refuted by concerted efforts to address minority achievement and success as well as the fights to end *de jure* and *de facto* segregation for control of local schools and for culturally responsive curricula. The achievements of educators dispel the myth that the situation is hopeless. Escalante's success with teaching calculus to Chicano students and Principal George McKenna who brought forth changes in attitudes and achievements at George Washington High School are only two of the numerous examples.

We must also correct another myth: that quality education for all is a luxury which we cannot afford. This myth views education as an expense and not an investment. As a nation we must invest in education or face mediocrity. For every dollar spent on education, nine dollars must be spent to provide services to dropouts. Most prison inmates are school dropouts, and each inmate costs the nation about \$28,000 a year. The national mindset must be changed from viewing education as an expense to viewing it as an investment. The American future depends on this change in mindset.

The myth that bilingual education inhibits the learning of English must be eradicated. We live in a world of diverse people as well as diverse languages. It is imperative that people gain fluency in at least one language other than their first language. Finally, the myth that success or failure is within the complete control of each individual must be corrected. Not just anybody can make it in America. According to Donald Steward, President of the College Board, "[r]ace, economic background and financial stability now stand between a stu lent and a college degree." We must supplement that work with a supportive learning environment.

When these myths about minority education are eradicated and replaced with correct information, education for all students will improve.

2. Address In-school and Out-of-school Obstacles to Education. In-school obstacles include the following: low expectations from



teachers; tracking minority students in nonacademic courses; inadequate school financing; scarcity of minority teachers; over reliance on testing; poorly prepared teachers; disregard for linguistic and cultural diversity; and placing children in disabled or remedial learning groups.

Out-of-school obstacles include poverty and hopelessness; the absence of educational legacies in families where parents have less formal education and often find it difficult to help their children navigate through school; negative peer pressure which prompts black students to reject education rather than risk alienation by peers for "acting white;" and a culture where young girls find acceptance by having a baby, and young boys find identit, by joining a gang.

Addressing these issues both in the schools and community will enable America to bring more minority students to school and keep them there. These hurdles must be removed from students' paths.

3. Restructure American Schools, Community Colleges, Colleges and Universities. A quality education for minority and majority students alike demands school restructuring. Parents, students, faculty members, policymakers, and community members must become involved in restructuring. Schools must decrease tracking and promote more cooperative learning; demand less rote learning and more emphasis on inquiry, problem solving and critical thinking; and less authoritative school planning with more shared governance that empowers parents, teachers, administrators, and students.

Teachers must set high, yet reasonable, expectations, encourage students to reach their highest potential, and respect the language and culture of the student. We must work diligently to bring educational equity to all schools and ensure that inner city schools become equal to, if not better than, affluent suburban schools.

In higher education, cooperative programs between schools and colleges to address student

preparation must arise. Schools and colleges must collaborate to institute core curriculum requirements, increase pre-college counseling and establish residential summer programs to bridge the gap between secondary and higher education.

Use of narrow standardized tests as the predominant criterion for student admission to college must be examined. Strides must be made to develop more comprehensive assessment measures that identify student strengths and weaknesses and assist faculty to develop learning programs.

Over reliance on a European-centered curriculum must end and more emphasis on including multicultural perspectives in the college curriculum must occur. The American curriculum must reflect the extraordinary pluralism of its culture, including the role of minority scholars in the areas of history, science, art, and literature. If Asian, Black, Hispanic and Indian faculty members can teach European and American history, there is no reason why we cannot expect a white professor to teach Chicano, Black, Asian, or Indian history.

- The retention and graduation of minority students must take top priority in higher education. Colleges must develop action plans that involve faculty in strengthening the quality of teaching and learning by setting goals for academic achievement and retention of students in their classes.
- Front loading academic and counseling services for incoming freshman students must continue through developing faculty advisement programs; creating collaborative learning activities as well as fostering an exciting, stimulating classroom climate where students can freely interact with faculty, counselors, and peers.
- College departments should link salary and promotion decisions for faculty and staff to efforts made to increase minority enrollment, retention, and graduation.



- Racism and sexism must be removed from our college campuses. Colleges should institute well defined and enforced policies on racial and sexual harassment.
- Sufficient financial aid should be made available from federal, state, and institutional sources to allow the least affluent students to go to college.
- A national Doctoral Opportunities Program to provide mentoring and funding for talented minority undergraduates must be established so that undergraduate students who wish to pursue careers as college professors may be identified early.

The crucial role of community colleges must also be underscored as a part of the restructuring of American schools. First, community colleges are considered the most important source of potential minority bachelors degree recipients. Second, community colleges represent the last glimmer of hope for minority students whose only chance to start college is a local two-year institution.

Nonetheless, opportunities for minorities to begin a bachelors degree program in a community college have diminished and the community college transfer function is in jeopardy. Few minorities receive the proper academic counseling and support to transfer to a four-year college, and fewer go on to earn bachelors degrees. Some people wonder why minorities make such a fuss over the transfer rate. Let me give you the bottom line: If minority students do not transfer, they do not earn bachelors and graduate degrees. Quite simply, if minority students do not transfer, access is threatened. What can be done?

❖ First, community colleges and four-year institutions should work more closely to clarify and enforce articulation agreements. There is no reason why we cannot expect two- and four-year colleges to develop a common core curriculum in major fields of study; create transfer centers; develop

- financial aid packages for transfer students; offer dual admissions arrangements; guarantee admission for students fulfilling general education requirements; provide for faculty and data exchanges and offer summer experiences for students.
- Second, states and community colleges must establish enrollment goals for minority student transfer and minority bachelors degree recipients. Greater numbers of minorities will earn bachelors degrees if the minority student transfer rate is increased to 30%. States should offer financial incentives to institutions that meet or exceed stated goals.

In short, what we need is less rhetoric and more action. We need to launch a war against mediocrity, incompetence, and the systemic inequities that keep minorities and the poor away from all that America has to offer. Make no mistake about it, education for at-risk students is the platform for democratic education.

Hope and Heroes

Recently, I was reading my favorite cartoon strip, Feiffer. There was a cynical character who proclaimed, "In the 1960's, Andy Warhol said that in the future everyone would be famous for 15 minutes. But in the 1990's, 15 minutes is how long dreams last." Yet, for optimists like me, the decade of the 1990s promises hope for people.

Our students must look beyond football, basketball, and boxing stars for inspiration. If we are going to turn schools around, we as teachers, as counselors, as administrators must be the new heroes and heroines that bring hope to students and families that have lost faith in the American educational system. Real heroes are already emerging:

♦ Parents are the heroes and heroines who have become actively involved in running the schools in Chicago where high school dropout rates hover around 50%.



- One-hundred black men in Atlanta, Georgia are heroes who have taken it upon themselves to adopt a junior high class of at-risk children.
- Principal Deborah W. Meier is the heroine who raised East Harlem's reading scores from the lowest in New York City. Currently 63% of its students now read at or above their grade levels.
- Uri Triesman, at the University of California at Berkeley, designed a workshop that succeeded in improving the math skills of minorities at 30 colleges.
- ♦ Tribal leaders, parents, students, and teachers, who decided to restructure their schools and include more Zuni history, culture, and languages at the Zuni public school district in New Mexico reduced dropout rates of over 46% to 2.8%.
- ♦ Janet Lieberman has developed the Middle College High School at La Guardia Community College in New York where the retention rate of at-risk students is above 80%.

These heroes and heroines convey to us not only their boundless passion for life, but more importantly, that the situation is not hopeless. Who has the answers? We do. Who has the power? We do. You and I can be heroes and heroines. You and I can make dreams come true for all students and the future of America.



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Ernest L. Boyer is President of The Carnegie Foundation for the Advancement of Teaching. Before joining the Carnegie Foundation in 1979, he served as the twenty-third United States Commissioner of Education and as Chancellor of the State University of New York.

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